

# INSIDE DOPE

by GEORGE F. TAUBENECK

More Truth Than Poetry  
New Audience Every Day  
Maybe He Should

Little White Lies  
Not Superstitious, But ...  
Visual Evidence

Voices In the Night  
Might as Well Face It  
Other Side of the Forest  
Delayed Devastation  
Time Out for a Smoke

Do Women Talk Too Much?  
The Cutter Knew Him  
Other Types of Women  
Give Him a Chance, Hey?

Remember?  
At Long Last!  
Poor, Dumb Boy!

Insult Supreme  
Case of the Dumb Parrot  
They're More 'Hep' Nowadays  
Social Security  
Elmer Deserved It

## More Truth Than Poetry

If all the people who wrote verse and submitted it to publishers would buy books of poetry, publishing would be a cinch. Trouble is, there are 100 versifiers to every buyer.

Poetry—even good poetry—is not only unsaleable; it haunts the waking and sleeping hours of publishers. Yet, it seems to hold a certain fascination for everybody who can hold a pen. Take the woman who was pouring tea for a young man who had admitted, with arched pride, that he was a poet.

"Have another French pastry, won't you?" she ogled. "It's so romantic to be with a poet. My husband has no use for the Finer Things in Life. He manufactures wastebaskets."

"Oh, he has his place," returned the realistic versifier. "You'd be surprised at how much poetry can be found in wastebaskets."

## New Audience Every Day

Bruce Barton, who wrote the two most-repeated advertisements of all time ("Fifteen Minutes a Day" for a set of books, and "Of Course I Remember You—You're Mr. Addison Sims of Seattle," for a memory-training course), often justifies repetition in advertising.

"You're addressing a parade, not a static audience," he reiterates. "Every day millions are born, millions die. Each group you address is a shifting audience; and many of your readers never will have seen your message before."

This is a valid principle; and on the assumption that a number of the perusers of these tales may not have heard it before, we take the liberty of re-introducing a guffaw which will be familiar to old-timers.

At one of those intimate home musicales, a guest had taken just about all he could stand of the soprano's screeching. Turning to the man seated beside him he groaned:

"Oh Lordy, Lordy. That's the worst singing I've ever heard. Who in the hell is she?"

"My wife," identified the other fellow.

"Godness me. I'm so sorry. No doubt it's that terrible song she's singing . . . who in the world could have composed it?"

"I did."

## Maybe He Should

"Golly," exclaimed Mr. Oldboy, "my morning shave makes me feel 10 years younger."

"Bah? Oh," yawned his sleepy-eyed bride. "Maybe you should shave at night occasionally."

## Little White Lies

"I've heard you tell many a lie," stormed Mr. Big in one of those battles that are commonplace in many marriages.

"Perhaps, dear," casually admitted Mrs. Big. "But I do think a wife should say a few nice things about her husband once in a while. Don't you?"

(Concluded on Page 10, Column 1)

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## Minard Elected President of Trane

LA CROSSE, Wis.—Donald C. Minard, 48, has been elected president of The Trane Co., one of the nation's largest manufacturers of air conditioning, heating, and ventilating equipment.

R. N. Trane, 64, founder and president since the company was organized in 1913, was advanced to the new post of chairman of the board. He will remain active in the management, continuing to give help and counsel, and guiding engineering and product development.

Mr. Trane pointed out that the company required the services of a younger executive because of its growth during the past 10 years. He (Concluded on Page 4, Column 4)

## PAD Fears Others May Follow as Va. Exempts Self from Gas Order

WASHINGTON, D. C.—Fear that several other states may do likewise was expressed by officials of the Petroleum Administration for Defense after Virginia and Maryland exempted themselves from provisions of PAD's new order limiting the use of natural gas.

The two states' public service commissions notified the White House they had authority to restrict use of gas in their states and were so doing to the extent necessary for defense purposes.

Under an amendment to the new Defense Production Act, such a certification allows a state to establish its own natural gas regulations. Virginia was the first state to make use of this privilege, with Maryland following suit shortly afterwards.

Limitations on use of natural gas for home heating and large-volume (Concluded on Page 4, Column 1)

## Gilbreath Heads List of Servel Appointments

EVANSVILLE, Ind.—John A. Gilbreath, formerly sales manager of the air conditioning division of Servel, Inc., has been named assistant vice president in charge of the division, in one of a series of new appointments announced by W. Paul Jones, president.

Five new vice presidents have been named, along with other personnel changes, Jones reported. He said the new appointments were made because the company's operations had become more diversified in the past several months, citing growing interest in the company's all-year air conditioner for homes and commercial buildings, the introduction of a motorless electric refrigerator—an addition to the line of gas and kerosene-fueled refrigerators produced by the (Concluded on Back Page, Column 4)

## Murphy of Carrier Dies at Age of 71

SYRACUSE, N. Y.—Edward T. Murphy, 71, senior vice president of Carrier Corp. here and a member of its board of directors since 1930, died Aug. 21 in San Francisco after a brief illness.

Known throughout the air conditioning and refrigeration industry with which he grew up as "Ned" Murphy, he was one of the seven founders of Carrier Engineering (Concluded on Page 21, Column 1)

## NPA Gives Basis Of Judging Bldg. Essentiality

WASHINGTON, D. C.—Criteria which it will use as a basis for determining whether or not authorization of a construction project will be granted and materials allotted under the new regulations adopted Aug. 3 have been announced by the National Production Authority.

The agency also issued explanatory information dealing with special circumstances arising from various aspects of the new regulations.

NPA said no non-essential construction which can be postponed will receive allotments for the fourth quarter, and no commercial construction will get fourth-quarter allotments unless the denial will adversely affect public health, safety, or welfare.

Among the types of commercial construction which will be considered in allotment of controlled materials by NPA are service facilities, warehouses, stores, office buildings, and radio and television facilities.

The new regulations bring all construction under the Controlled Materials Plan beginning Oct. 1. They enable a builder to authorize his own (Concluded on Back Page, Column 1)

## Thor Automatic Washer To Retail at \$299.50

CHICAGO—Thor Corp. has added an automatic washer to its product line.

The company claims it thus became "the first company in its industry to make and sell a full line of washing machines—an automatic, a semi-automatic, and conventional wringer models."

The new washer, to be known simply as the Thor Automatic, will be priced at \$299.50 and will first go on sale late in September in the Chicago market area.

Distribution for the rest of the country will follow on a market-by-market basis, with the markets and their respective introduction dates to be announced later. National distribution is not expected to be reached until spring of 1952.

Announcement of the new model was made by John R. Hurley, Thor president, who said it is basically, an automatic version of the Thor spinner washer. It incorporates the (Concluded on Page 4, Column 3)

## Restaurants' Shrinking Profits Should Make Them Prospects for Cost-Cutting Equipment

CLEVELAND—There's a big opportunity in the restaurant market for salesmen of up-to-date refrigeration equipment who can prove to restaurant operators that their product can cut his costs.

Evidence in this direction was to be found at the recent convention here of the International Stewards & Caterers Association, a group that includes nearly 5,000 owners, operators, and other executives associated with restaurants, hotels, clubs, and catering groups. The big topic of conversation was on the subject of declining profit margins.

"My profit margin is now about 3% of gross sales; three years ago it was almost 8%," said the proprietor of one of Detroit's most noted restaurants.

One of the officials of the 17-unit Stouffer's chain indicated that the firm's profit margin had dropped about a third from a year ago.

## Deepfreeze Offers 6 New Freezer Models In 4 Sizes

NORTH CHICAGO—Six new home freezers with increased capacities and improved engineering and convenience features have been announced by Deepfreeze Home Appliance division of Motor Products Corp.

The new merchandise is scheduled to reach major appliance dealers' floors early in September and will be backed up by an intensive national advertising introduction in magazines and newspapers, according to Ben G. Sanderson, general sales manager of the company.

Six models in four sizes comprise the new line, Sanderson said. Four of these are in deluxe categories. The new capacities are 7, 13, 17, and 23 cu. ft. All sizes are being made available in deluxe models, while the 7 and 13-cu. ft. freezers will be also offered in standard models.

Prices on the new line range from \$299.95, suggested retail price for the 7-cu. ft. standard model, to \$639.95, suggested retail for the 23-cu. ft. deluxe freezer. Prices quoted were based on Aug. 1, projections, (Concluded on Page 21, Column 3)

## Muntz Room Cooler Is Sold In 3 Areas; New '52 Models Planned

CHICAGO—In newspaper advertisements here Sunday, Aug. 19, Muntz TV, Inc. declared that its invasion of the air conditioning field was "official," and offered room coolers in both window and console models at specific retail prices.

The advertisement stated that Muntz has acquired the tools, dies, and entire inventory of Tropic-Aire. A spokesman for the company said that the company will market the finished inventory of Tropic-Aire room coolers in the Chicago, Washington, and St. Louis areas during the balance of this season and would introduce its own line of room cooler models next year.

Copy in the advertisement said that "Typical 'factory-to-you' Muntz merchandising will soon annihilate the A-C market with a great new line of brilliantly engineered air conditioners. But now . . . as Muntz tools up for immediate, full-scale production . . . here's an unprecedented opportunity to own a fully guaran- (Concluded on Page 4, Column 2)

## Calif. Contractor Group Firm on Bargaining Plan

'Peculiar Problems' of the Industry Establish Right To Negotiate Contracts

LOS ANGELES—The Refrigeration & Air Conditioning Contractors Association of Southern California, Inc., said it will "stand firm on its rights" as a collective bargaining agency for the local refrigeration industry.

The association's position was stated in a 13-point program drawn up recently.

The program, submitted by Henry B. Ely, executive secretary, covers federal regulations, labor relations, an apprentice program, legislation, group workmen's compensation, and other matters.

In the section of the program dealing with labor relations, it was stated:

"At the present time the association is the collective bargaining agency for its members on negotiations and grievances with the branch of U. A. 250, known as Refrigeration Fitters.

"There have been many rumors concerning the relationship between the association and the Refrigeration Fitters.

"Since there are many problems in the refrigeration and air conditioning industry which are not comparable to those in other trades, the association takes the position that it will stand firm on its rights as a collective bargaining agency for the refrigeration industry.

"In addition all unsettled grievances between members of the asso- (Concluded on Page 2, Column 4)

## G-E, Hotpoint Seek OPS Approval on Price Rises For Appliance Lines

WASHINGTON, D. C.—General Electric Co. and Hotpoint Inc. have applied for price increases on their lines of appliances, it has been confirmed by the Office of Price Stabilization.

General Electric filed Form 8 notifying the agency that it plans to price under CPR-22. G-E had previously priced its appliances under the GCPR.

In accordance with OPS regulations, General Electric could begin using the new prices within 15 days after the application was received by the government agency, unless OPS within the 15-day interval notifies the firm not to use the proposed new price schedule.

## Household Refrigerator June Sales Drop Again

NEW YORK CITY—Manufacturers' shipments of household electric refrigerators in June showed a decline for the third successive month, according to totals released by the National Electric Manufacturers Association (NEMA).

World shipments in June totaled 309,423, compared with 348,423 in May. The May figure was lower than April. In June, 1950, the total shipped was 549,746 units.

Total shipments by NEMA members for the first six months of 1951 were 2,606,660 units, as compared with 3,062,289 for the first six months of 1950.

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### Blue Book Plus \$50 Offer Gets Good Response

SALT LAKE CITY—Granite Furniture Co. here obtained "better than expected" results from a newspaper advertisement offering readers "\$50 over the Blue Book value of your refrigerator on the purchase of a new Kelvinator."

Incorporated in the advertisement was a coupon inviting householders to get a free estimate on the value of their refrigerator. Explained a store official:

"People are used to the 'blue book' in used car transactions, but this is the first time they realized that their own refrigerator had a stipulated, standard value."

"We had quite a few callers come in just to see what their refrigerator was worth, and several actual sales were closed when they realized that the trade-in we were allowing was much more than the value of their machine."

### UsAirco Gets Govt. Order For 200 Window-Type Units

MINNEAPOLIS—The Public Building division of the General Services Administration of the U. S. Government has contracted for the purchase of 200 UsAirco ¾-ton window-type air conditioners for installation in various government buildings in Washington, D. C., it was announced by D. E. Feinberg, vice president in charge of the refrigeration division of the United States Air Conditioning Corp.

### Westinghouse Announces Money-Back Guarantee On Frost-Free Line

MANSFIELD, Ohio—A 30-day money-back guarantee to purchasers of the company's Frost-Free line of refrigerators has been announced by George H. Meilinger, sales manager of the household refrigeration department, Westinghouse Electric Appliance division.

"Recent advertising claims," Meilinger pointed out, "have left the consumer confused as to what is automatic defrosting. The money-back guarantee is given as further proof to the user that the Frost-Free system will give the housewife all the benefits of automatic defrosting claimed for it."

"The offer is very simple," Meilinger explained. "The dealer sells, delivers, and installs a Frost-Free model in the customer's home and if, within 30 days, she is not completely satisfied, the dealer will take it back and refund the full purchase price."

To aid in dealer promotion, the company is preparing newspaper advertising mats in full-page, 1,500-line 1,000-line, and 750-line sizes.

### Liquid Freeze Gets Army Order

OAKLAND, Calif.—Liquid Freeze Corp. here has received an order from the Army Corps of Engineers for 133 Instant Ice machines for the U. S. Army base which is located in Oakland, according to a company representative.

### Borden Plans To Market Frozen Foods In N. J.

NEWARK, N. J.—Borden has announced its entry into the frozen food business here with the formation of Borden's Frozen Foods, Inc.

Initial sales will be limited to New Jersey, but the company remains silent on plans for nationwide distribution through outlets of the parent dairy company.

The operation is headed by John R. Ellery, who is also president of the company's produce division. Distribution will be handled by M. Augenblick & Bro., a Borden subsidiary.

Borden's entry into this field was largely the result of a shift in distribution methods by the producers of national brand frozen foods. The Augenblick firm was left with a staff of salesmen and 28 four-ton refrigerated trucks by their move.

Owning no packing plants itself, Borden will put its own label on frozen foods obtained from processors and will sell to service wholesalers or distributors. Elsie, the Borden trade-mark, will appear on the packages.

### Beullieu To Distribute Hussmann Equipment

LAFAYETTE, La.—Beullieu Air Conditioning & Heating Co., 518 South Pierce St. here, has been appointed distributor of the Hussmann line of commercial refrigeration equipment.

### Southern Calif. Contractors--

(Concluded from Page 1)

ciation and Local 250 can be handled through the association office.

"Association members also employ members of other unions and recent developments point to assistance which the association can give members in this regard."

Extracts from other sections of the program follow:

"Federal Regulations—The executive secretary has . . . subscribed to services which place on his desk, within 24 to 48 hours, any regulation issued concerning materials, prices, or wages. That regulation is examined for its relevancy as to members of the association and, as the need arises, a special bulletin is issued. . . .

#### APPRENTICE PROGRAM

"Apprentice Program—Conversations have been held with the apprentice coordinator in charge of refrigerator fitters. He is desirous of having the full cooperation of members of the association in connection with the training of apprentices. . . .

"It will be the function of the office of the executive secretary to advise the association apprentice committee of meetings of the joint apprentice committee, attending any such meetings whenever necessary, and implementing the work of the apprentice committee in connection with the needs for equipment, interest of members, and the like.

"Legislation—During the 1951 legislature, the association acted upon such proposed legislation as the repeal of the listing of subcontractors on public works, the permitting of additional regulations of contractors by cities and counties, the attack on group compensation insurance, and other legislation.

"The mechanical trades in the construction industry . . . have been subjected to regulations from every governmental source. . . . It will be the policy of the association to act in cooperation with the contractors' associations, both general and sub, for the purpose of presenting a unified front in matters of legislation affecting the construction industry.

"In the near future an interim committee of the legislature will consider the question of whether or not general contractors should list sub-

contractors on bids for public work. The program of the association should be to work with the sub-trades and the generals for a satisfactory solution of this problem. . . .

"This interim committee will also consider the overlapping of building codes between the state and various municipalities of the state. The membership has a definite interest in this subject matter.

"It may also be possible to bring before this interim committee other problems, well known to all, which beset the construction industry in southern California. . . .

#### INTERIM COMMITTEE APPOINTED

"In addition . . . an interim committee of the legislature has been appointed to consider the advisability of group compensation insurance, a matter of special interest to members. . . .

"Ordinances—Problems of interpretation of ordinances, conflicts between divisions having jurisdiction over refrigeration work will be handled by the office of the executive secretary.

"Group Workmen's Compensation—The office of the executive secretary will continue to cooperate with the State Compensation Fund in questions relating to group insurance for members. . . .

"In addition, the association should assist the members in improving conditions of safety. . . .

"Home Show—The association is one of the owner-sponsors of the Home Show. During the last year it has not taken an active part in either the management of the Home Show or its exhibits.

"It is recommended that, in cooperation with other sponsoring associations, the association have an active voice in affairs of the Home Show. It is also recommended that the association sponsor an exhibit in the 1952 Home Show assisted by manufacturers of refrigeration equipment."

Other points in the program cover answering inquiries from members, relations with governmental authorities and other trade associations, the monthly association bulletin, publicity, financial arrangements, and miscellaneous items.



**NEW design**

**"Cross-Flo"**  
THE MOST EFFICIENT DRIER-FILTER EVER MADE

**NEW**

**FIBERGLAS DEPTH FILTER**

Provides vastly increased filtering capacity to take care of even the dirtiest jobs—improved efficiency for even the smallest capillary tube job.


**NEW**

**MOLDED REMCAL DRYING ELEMENT**

of super-strength molded calcium sulphate provides increased moisture absorbing capacity and improved efficiency even at liquid line temperatures as high as 150° F. and dew point temperatures as low as -60° F. Improved design also provides increased flow area—pressure drop and premature clogging and plugging are entirely eliminated.


Send for New Illustrated Folder  
In Stock By Leading Wholesalers

**REMCO**  
INCORPORATED  
ZELIENOPLE, PENNSYLVANIA



**MODEL 6710**

A sure lure for promoting sales of produce, dairy products, and other long-profit perishables. This wide, handsome Koch case with big, gleaming back mirror spells extra profits in terms any merchant can understand. The finest open case at any price.



**MODEL 306**

Triplies the appeal of dairy products, delicatessen, and bottled goods. Any alert grocer can see how the three easy-to-reach shelves will increase impulse purchases . . . and pay for itself in no time. Each shelf independently refrigerated and fluorescent lighted.



**MODEL 5710**

Here's new glamour for your prospects' pre-packaged fresh meats, produce, dairy products, and delicatessen. 10-ft. long. Open front for easy access by customers or by clerks. Refrigerated lower compartment for speedy re-stocking. Brilliant fluorescent lighting.

# KOCH

gives you something to

"Sell about"



#### TO STIMULATE SALES IN TODAY'S MARKET

It takes more than gleaming cases and fast conversation to sell refrigerators today. If your prospect starts crying the blues, he's wide open for a wide-open Koch case, the kind that helps fill shoppers' baskets and dealers' cash registers. Delicious foods, attractively arranged in a gleaming extra-large Koch case, pulls plenty of extra sales that amortize the cost in a surprisingly short time.

Investigate the unique sales-features of Koch cases today . . . the kind of features that give you something to sell about. A note directly to the factory will bring a prompt reply.

# KOCH Refrigerators

NORTH KANSAS CITY 16, MO.

Since 1883

Write Today for Details  
and Open Territories



## Gov't Releases 25,000 Tons To GSA as Aid To Copper Shortage

WASHINGTON, D. C.—President Truman acted to relieve a shortage of copper for defense production as the National Production Authority moved to provide more efficient distribution of steel under its allocation system.

Mr. Truman authorized the Munitions Board to release 25,000 tons of copper from the national stockpile to the General Services Administration. Major cause of the shortage was said to be a Utah steel workers' strike, later called off pending study of the dispute by the Wage Stabilization Board.

The walk-out had resulted in a loss of about 10,000 tons of copper a month, according to Charles E. Wilson, Defense Mobilizer. Wilson said around 10,000 of the 25,000 tons have already been released for sale to meet defense needs.

The NPA said its steel distribution order, which requires mills to fill Government-approved orders on a first-come, first-served basis, would be modified.

Steel mills have protested that under the NPA system, they often have to take care of new customers at the expense of established patrons. They have further complained that shipments often must be made to distant points that would be served better by mills closer to home.

As modified, the NPA order will allow mills to fill whatever orders they wish and turn down others up until 15 days before the end of the established "lead-time." During the last 15 days of the "lead-time" period, the mills would have to resume filling NPA-certified orders on a first-come, first-served basis.

The change in rules should permit producers to give established customers better service and cut to a minimum disruptions in normal producer-consumer relationships, NPA officials said.

## 50% Limit on Advance Quarterly Allotments

WASHINGTON, D. C.—A limit of 50% on the amount of material a manufacturer may order for any one month on an advance quarterly allotment of steel, copper, and aluminum has been announced by the National Production Authority in Direction 3 to CMP Regulation 1.

The amendment also has a provision to aid small users. Any small user whose quarterly allotment or advance allotment of carbon steel is equal to or more than a carload lot will be allowed to order a carload lot at one time, even if this comes to more than the 35% limitation permitted for the month.

In order that such small users can order directly from the mills, the amended direction states that the small user does not have to reduce his order below a carload lot to comply with the 35% provision.

Since the advance allotments are percentages of preceding quarterly allotments, 50% of an advance allotment would come out roughly to 35%, or less, in most cases of the regular quarterly allotment.

## Buffalo BBB Clarifies 'No-Money-Down' Claims

BUFFALO, N.Y.—The Buffalo Better Business Bureau Inc. issued a statement to clarify the relaxed credit restrictions on purchases of appliances.

The bureau said that following the enactment of the amendments some merchants have used "No-Money-Down" statements in their advertisements, "and then explained that a trade-in could be used as a down payment." The bureau continued:

"However, these ads failed to consider those transactions where the trade-in allowance would not amount to 15% of the purchase price and a partial cash payment would be required."

The bureau recommended that this advertising be further qualified "to say that the article can be purchased on a no-money-down basis providing the trade-in allowance covers the full 15% down payment required by Regulation W."

## Industry Firms Lead In Conserving Materials

WASHINGTON, D. C.—The refrigeration and other consumer durable goods industries have taken the lead in conserving scarce and critical materials by developing new manufacturing techniques and relying on practicable substitutes, the NPA states in a report just released.

In so doing, the producers of such equipment are making possible production of increased number of units than would otherwise be possible with the restricted amounts of materials that they are now permitted to use.

Citing some examples (without releasing actual names) of how industry is cooperating with the government's conservation program, NPA pointed to an Ohio refrigerator manufacturer who is saving nearly 12,000 lbs. of steel in every 1,000 refrigerators which the company builds by using plastic crispers and plastic storage bins, both formerly made of stainless steel containing 8% nickel.

The same firm saves another 1,600 lbs. of steel per 1,000 units by using porcelain enameled steel instead of stainless steel in pans using to catch defrost water.

A home freezer manufacturer conserves 2,500 lbs. of steel in every 1,000 home freezer units by using reinforced plastic liners instead of porcelain steel liners, according to the NPA.

The same manufacturer is saving 10,000 lbs. of scarce copper per 1,000 freezers by using steel tubing in place of conventional copper tubing.

An electric range manufacturer in Michigan has reduced his copper requirements 5% on every stove built simply by re-routing the wiring within the range.

A Pennsylvania refrigerator manufacturer, says NPA, estimates he conserved 445,000 lbs. of aluminum, 61,000 lbs. of copper, 204,000 lbs. of zinc, and 10 million lbs. of steel in the first six months of this year compared with the same period in 1950 by using 80 alternate materials in his manufacturing process. The same firm is said to be planning to introduce 40 more alternates which will conserve still more scarce minerals and metals.

## Pere Marquette Air Cools New Orleans Building

NEW ORLEANS—Work has started on a year-round air conditioning system in the 18-story Pere Marquette Bldg. here.

The system is expected to be in operation by the summer of 1952. Recently the basement was enlarged by 35% to make room for the 500-ton centrifugal refrigeration equipment necessary to handle the system.

"No difficulty is expected with government restrictions since orders were placed and contracts awarded in advance of limitations on this type of construction," according to T. H. Lynch, Jr., who is building manager.

Work is being done by Cary B. Gamble & Associates, consulting engineers; Sciambra and Masino, Inc., plumbing and heating contractor; Neumann Electrical Co., and Perilliatt-Ricket Construction Co., Inc.

## 4,500 Stop Watches Will Dramatize 'Red Hot' Story

MANSFIELD, Ohio—The world's largest single order for stop watches—4,500 of them—was placed by the Westinghouse Electric Appliance division, it was reported by R. M. Beatty, manager of the electric range department.

The split-second timers will be used by Westinghouse electric range dealers to dramatize the "Red Hot in Thirty Seconds" feature of the company's high-speed Corox surface unit.

The stop watch demonstration is one of many planned to promote the sale of Westinghouse ranges this fall, Beatty said.

The stop watch order was too big for any maker to fill in time for the promotion and all of the timers will be imported from Switzerland. The supplier said the Olympic games previously held the record for largest single order of stop watches.

## 7 Retailers Charged With CPR Violations

BUFFALO—Seven retailers in the western part of New York state, including some in the home furnishings field, have been charged with failure to comply with the requirements of Section 11 of the Ceiling Price Regulation.

Preliminary injunctions restraining the firms from selling directly or indirectly any of the commodities they handle until they have filed the required price chart have been asked in Federal Court here by James P. Cotter, OPS director of enforcement in the Buffalo district. Hearing on the motion for the injunctions is scheduled for Aug. 27 before Federal Judge John Knight.

In his charges against the retailers Cotter said that each of the defendants was visited by OPS representatives and given an additional 10 days in which to comply with ceiling price requirements. In all cases, he declared, the firms failed to file the required pricing chart.

## Wayne Home Equipment Co Reduces Prices 5 to 10%

FORT WAYNE, Ind. — Wayne Home Equipment Co., Inc., manufacturer of oil, gas, and coal heating equipment, home water systems, water heaters, and water softeners here, announces a reduction of prices averaging from 5% to 10%, effective Aug. 15.

Improved manufacturing facilities and steadily increasing sales made it possible to reduce prices.

## Jets May Cause Oil Lack In Case of All-Out War

ALMA, Mich.—Because of the nation's increasing use of jet aircraft, another all-out world war would bring even more drastic rationing of gasoline and heating oil than was in effect during the last war.

So Thomas L. Apjohn, assistant director of the Petroleum Administration for Defense's refining division, told a regional meeting of the Western Petroleum Refiners Assn.

Jet planes require more than twice as much fuel as conventional reciprocating engine planes, Apjohn pointed out. Furthermore, he said, combat planes, including jets, are becoming bigger all the time.

## Air Force Opening Base At Clovis, New Mexico

WASHINGTON, D. C.—The Air Force recently activated the 829th Air Specialized Depot at Gadsden, Ala., will activate a base at Clovis, N. M., Sept. 1, and has requested reacquisition of Palm Beach International Airport, formerly Morrison Field, West Palm Beach, Fla.

Most of the 850 population proposed ultimately for Gadsden installation will be civilian employees.

Congressional authorization has been requested to improve facilities at the Clovis base, which will have a population of about 1,700, including 300 civilians.

Authorization of \$8.3 million has been asked for additional land and new construction of base facilities at the former Morrison Field.

## Byrd Airport Terminal To Get Air Conditioning

RICHMOND, Va.—A contract for \$4,334 has been let for furnishing and installing an air conditioning unit for the Byrd Airport terminal restaurant, according to the city's Bureau of Purchases.

The air conditioning unit was the subject of much debate in City Council. Council first approved a contract with the Civil Aeronautics Authority for a joint expenditure of funds at the airport, including the air conditioning.

Then, when the time came to appropriate the money, council forgot that it had already approved the contract, and killed the appropriation ordinance. At its next meeting it reversed itself and approved the air conditioning expenditure.

Originally, \$10,000 was to be spent for air conditioning the terminal and other parts of the building, according to the Richmond Times-Dispatch. Half of this is to come from the Federal government, half from the city.

J. H. Gould, director of public works, said the reason the contract award is so much smaller than the amount set aside is that the specifications have been changed. Difficulty in finding the necessary equipment made the change necessary, he said.

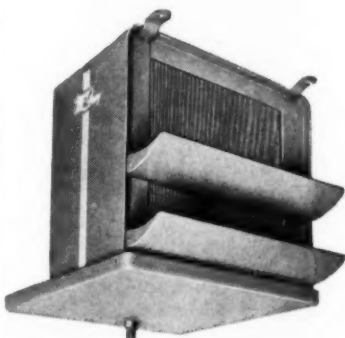
### MORE INFORMATION?

Use Handy Coupon on "What's New" Page of this issue.  
Use Key No. for fastest service.



**TWO-WAY UNIT COOLER**

Designed for applications above 35° F., compact and efficient, for direct draw bars, back bars and reach-in refrigerators where space is limited. In two sizes, 90 and 135 B.T.U. (Basic refrigeration rating.)

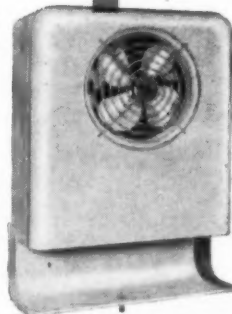


**PACEMAKER UNIT COOLER**

Provides efficient compact "low sides" where fixture temperatures above 35° F. are required. For back bars, novelty boxes, walk-in coolers, etc.

**PANEL TYPE CHILLATOR**

Designed for wall mounting. For reach-in cabinets, beverage coolers, back bars and small walk-in cooler applications above 35° F.



**RADIAL UNIT COOLER**

For refrigeration applications above 35° F., as well as for economical comfort cooling installations in small offices and shops. Allows maximum head room. In seven sizes, from 200 to 870 B.T.U. (Basic refrigeration rating.) Nominal comfort cooling ratings from 3/4 to 3 tons.

## SPECIFY McQuay UNIT COOLERS

...Take the headaches out of installation and service jobs!

An advantage of specifying McQuay Unit Coolers is the ease with which they can be installed and the minimum of service they require. McQuay Unit Coolers are designed to make your installation job simple. Connections are placed where you can get at them.

For trouble-free refrigeration or comfort cooling, it's McQuay. Only McQuay gives you Ripple-Fin coils with fins permanently bonded to tubes by hydraulic expansion. Consult the McQuay representative in your territory or write McQuay, Inc., 1607 Broadway St. N.E., Minneapolis 13, Minn.

# McQuay INC.

HEATING • AIR CONDITIONING • REFRIGERATION





## Gas Order--

(Concluded from Page 1, Column 2) industrial and commercial consumption were imposed recently in 15 eastern and midwestern states by PAD because of a shortage of steel for new pipelines.

If other states follow Virginia's lead, PAD officials fear there will be a scramble for more natural gas from the same pipeline. This, they say, could lead to state commissions becoming too lenient in allowing utilities to accept new gas customers.

The officials warned that a cold winter could force shut-downs in industry and shut-offs of gas to homes.

## Worthington Branch Is Opened In Harrisburg

HARRISON, N. J.—Worthington Pump and Machinery Corp. has opened a branch office in Harrisburg, Pa. at 506 Hall Bldg., 2nd and Locust Sts., according to T. J. Kehane, Worthington general sales manager.

The new office will be supervised by A. L. Mays.

## Correction

In the Aug. 6 issue it was incorrectly reported that John F. Miller would represent the Arcold Co. in a midwestern territory.

Miller is connected only with the Sherer-Gillett Co. of Marshall, Mich., representing that commercial refrigerator manufacturer as zone sales manager for the Michigan-Ohio-Indiana territory.

## Muntz In Cooling Field--

(Concluded from Page 1, Column 4) teed Tropic-Aire at a "never-never" price."

The advertisement pictured three models, a 1/2-ton window unit priced at \$199.95; a 3/4-ton window unit at \$249.95; and a 1-ton console unit at \$399.95.

The company spokesman said that merchandising of the air conditioners will follow the pattern established for Muntz television sets. In the latter, emphasis has been placed on the direct factory-operated outlets.

## OPS Tells How To Determine If You're Under CPR-22 or 30

WASHINGTON, D. C.—A manufacturer who has sold at prices higher than those that would be legal under the GCPR will then come under price regulations CPR-22 or CPR-30, whichever applies to the products he manufactures, the OPS has indicated.

The definition of a sale for the purposes of this interpretation is merely a buy-and-sell agreement, it was pointed out. No delivery need to have been made nor any money paid by the buyer.

It was made clear that the question of whether a sale had been made at a price higher than the GCPR price would be the sale test. The more complicated qualifications which had been set up under GOR-13 have been abandoned.

A manufacturer who has filed a notice with OPS that he intended to put CPR-22 or CPR-30 prices into effect after the 15-day waiting period (provided he didn't get a restraining order from OPS) but for whom the 15-day waiting period had not expired when OPS extended indefinitely the mandatory effective dates of CPR-22 and CPR-30 clearly would be able to remain under GCPR so long as he did not make a sale.

It appears that it will be the OPS policy to give applicants time to get increases allowed by the Capehart amendment before placing CPR-22 and CPR-30 into effect.

The Capehart amendment permits manufacturers price ceilings based on their pre-Korean war prices, plus reasonable costs since then.

The manufacturers will be allowed to decide whether they'll figure their ceilings under the Capehart amendment. If they'll gain from provisions of the amendment, they'll probably apply for price adjustments under it. However, if it would result in rolling back more of their prices than the other orders would, they can skip using it.

## Thor Automatic--

(Concluded from Page 1, Column 3) spinner's washing and rinsing action and Thor's patented sealed mechanism.

The new machine bears a close resemblance to the spinner washer, which will remain in production. Exceptions in appearance are a modernistic plastic escutcheon on the machine front, a single knob control at the right rear corner of the top, and a hinged, top-opening cover.

The machine measures 36 in. high, 25 in. deep, and 24 in. wide. The skirt is finished in baked enamel, inside and out. The tub and clothes basket are porcelain enameled inside and out.

The machine has a manual fill to permit varying amounts of water in keeping with varying load sizes. Once filled, the machine goes into completely automatic operation or, should the homemaker desire, any cycle can be altered or skipped entirely.

Most noteworthy feature of the unit is a new gyro balancer-clutch combination so designed, Hurley said, to completely remove the bugaboos ordinarily found in washing machines employing spin-drying principles.

With the new design, even the most off-center loads will not cause excessive vibration, nor will it cause the machine, which is not bolted to the floor, to "walk."

The washer will operate on a minimum of 15 lbs. of flowing water pressure. The average home has pressure ranging from 20 to 40 lbs. As a safety factor, the machine is designed to take pressure up to 120 lbs.

To install the unit, two separate threaded faucets (hot and cold) are required, instead of a mixing faucet.

Hurley said the company intends "to shoot the works" in the Chicago introduction. There will be heavy newspaper and television advertising, coupled with other merchandising plans which, he said, "will be definite innovations."

## Greyhound Station Cooled

MONTGOMERY, Ala.—Completely air conditioned, Montgomery's new Greyhound bus station, representing an investment of approximately \$300,000, held its formal opening recently.

## Rewa Lauds Appeal For Change In Tax On Condensing Units

Refrigeration Equipment Wholesalers Association  
Office of the President  
Chicago 28, Ill.

Editor:

Your article concerning the excise tax inequities as applied to wholesalers when reselling certain size condensing units and pumps to manufacturers is to be highly commended.

This tax law as written definitely imposes a hardship against the wholesaler in his efforts to be competitive.

On behalf of the Refrigeration Equipment Wholesalers Association, I wish to thank you and your excellent paper for this splendid publicity.

REWA has repeatedly advised its members to appeal to their Senators and Congressmen for relief. We have also notified the Senate Finance Committee that we wholeheartedly support REMA's proposed amendments to H. R. 4473 tax law.

J. P. GLASS,  
President

## Trane Elects Minard--

(Concluded from Page 1, Column 2) said that Minard had been instrumental in developing the company's present organization and position in its industry, serving as executive vice president for the past six years.

The new president joined Trane as a member of the first post-graduate engineering class in 1925. The continuing graduate school supplies the majority of the company's executive, engineering, and sales personnel.

After two years as a field representative in Buffalo, Minard entered the home office, serving successively as manager of heating sales and sales manager. He was elected a vice president in 1936, a director in 1944, and executive vice president in 1945.

## Judson Burns May Add Commercial Lines

PHILADELPHIA — Judson C. Burns, local distributor, has added electric housewares to its lines and plans to add air conditioning and commercial refrigeration equipment and gas ranges, according to Sam S. Glass, president.

The company was recently distributor for Knapp-Monarch Co. It expects to add other housewares.

The firm distributes Crosley major appliances and television and radio receivers and Apex home laundries.

## Sunbeam Seeks To Stop Unauthorized Dealers From Using Trade-Marks

CHICAGO—Sunbeam Corp. is asking dealers in fair trade states who have not signed the company's fair trade contract and who do not adhere strictly to the fair trade price to stop using Sunbeam trade-marks.

The firm warned that any direct or indirect use of its trade-marks and goodwill, other than in accordance with expressed conditions, "will be deemed an unauthorized interference with and appropriation of our property rights."

The request and warning were made in an advertisement signed by B. A. Graham, Sunbeam president.

Graham asked the type of dealer described above to "immediately cease advertising or using Sunbeam's registered trade-marks, brands, or names and goodwill, either directly or indirectly, and that he obliterate Sunbeam's registered trade-marks, brands, or names from Sunbeam products that he may now or later acquire and from the cartons in which such commodities may be packed, and that he remove and destroy all registered guarantee cards and all printed material. . . ."

Graham said dealers who haven't signed a fair trade contract but who are now obtaining the company's products are doing so contrary to Sunbeam's merchandising policy "and to the detriment of our distributors, the 65,816 contracting dealers, and the goodwill upon which all of us are absolutely dependent for continuance in business."

Graham noted two ways in which a non-signer gets Sunbeam products. One way, he said, "is by making a bootlegging arrangement with some dealer who signs a contract and who acts as an agent for the dealer who will not sign." Another "is for a non-signing dealer to fraudulently give a Sunbeam fair trade contract number to a distributor."

The company realizes, therefore, the statement continued, "that from time to time there may be dealers who do obtain Sunbeam merchandise in some nefarious manner."

"It is, of course, their lawful privilege not to sign such a contract and the U. S. Supreme Court has likewise held that any merchandise which such a dealer may happen to own may be sold at any price he sees fit."

"However, neither the U. S. Supreme Court in the Schwegmann case or in any other case, nor any statute or law has ruled that such a dealer would be entitled to advertise or use Sunbeam trade-marks, directly or indirectly, to assist him to make such sales for his own profit, when Sunbeam Corp. has expressly withheld permission from such dealer to use our trade-mark."

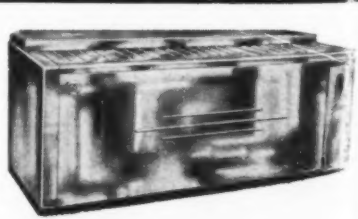
## LA CROSSE SUPREME COOLER



A BRAND NEW MARKET IS OPENING UP! Back to school means added demand for this low price-high quality cooler. This popular model is the right answer wherever refrigerated storage for milk and other dairy products is needed. Attractive blue baked finish with stainless steel lids. . . . 3" Fiberglass insulation. . . . Model 461 illustrated.

## LA CROSSE BLUEBIRD COOLER

SCHOOL DAYS ARE PROFIT DAYS—Get in on these added sales with the BLUEBIRD, ideal for schools, restaurants, hotels and factories for storing and dispensing milk, dairy products, soft drinks etc. . . . only 33" high . . . features easy operating push back doors . . . available in 4'—6'—8' models . . . either electric complete or remote installation . . . in Blue Hammer-oid or Stainless Steel finish.



## LA CROSSE COOLER CO.

2301 LOSEY BOULEVARD SOUTH  
LA CROSSE, WISCONSIN

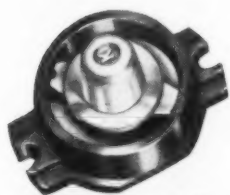
EXPORT REPRESENTATIVES:

Melvin Pine & Co., 80 Broad St., New York, N. Y.  
Cable Address: Ekimport

## Appliance Service Organization Saves Time and Money with Klixon Protectors

CHICAGO, ILL.: Russell J. Hickmon, superintendent for Walter C. Stutman & Company, a leading independent appliance service organization, states that KLIXON protectors have been saving him time and trouble for years.

"In the years I've been servicing refrigeration, air conditioning and heating equipment, I have found that KLIXON protectors eliminate motor burnouts completely. This simplifies our service work and promotes good will, not only between customers and our organization, but between customers and the appliance manufacturers."



Manual Reset

Automatic Reset

## Klixon Protectors Reduce Service Calls and Repairs by Preventing Motor Burnouts

The Klixon Protectors illustrated are built into the motor by the motor manufacturer. They keep motors in such equipment as refrigerators, oil burners, washing machines, etc., working by preventing the motors from burning out. Reduce service calls, minimize repairs and replacements by specifying that equipment has motors with Klixon Protectors.



SPENCER THERMOSTAT  
Division of Metals & Controls Corp.  
2408 FOREST ST., ATTLEBORO, MASS.



## Chrysler Bldg. East Employs 3 Different Types of Air Conditioning Systems

NEW YORK CITY—Three different types of systems will provide year-round air conditioning for all 32 floors in the Chrysler Bldg. East which is to be finished this year.

The new structure adjoins the original 77-story Chrysler Bldg. and is designed to afford maximum light for both buildings. The lower six floors of the new building abut the northeast wing of the older skyscraper but the tower will be at the opposite end of the block.

Cooling to the tune of 1,400 tons will be required to supply the three types of systems devised by the engineering firm of Guy B. Panero.

All three are planned to maintain a maximum of 80° F. and 50% relative humidity when the outdoor dry bulb temperature is 95° F. and the outdoor wet bulb reading is 75° F. During the heating season the system is designed to maintain a dry bulb temperature of 72° F. when the outside temperature is 0° F.

### FIRST SYSTEM COMBINES HEATING AND COOLING

The first system combines heating and cooling and is designed to take care of all outside space (approximately 16 ft. back from the outside wall) from the second through the 32nd floor. This system will employ 1,451 individual Airtemp air-handling units located beneath windows and five medium or low pressure outside air-preconditioning systems.

Function of the medium or low pressure preconditioning outside air systems is to furnish sufficient preconditioned outside air at a minimum of 0.3 cu. ft. per square foot of conditioned area and at the same time to provide a means of obtaining exact control of conditions in spaces having various exposures.

This will be accomplished by cooling with preconditioned outside air where sun effect exists and at the same time heating on other exposures by means of the window type units, according to Chrysler Bldg. officials.

### CONVENTIONAL AIR CONDITIONING

The second system will consist of conventional air conditioning to take care of all interior spaces from the second through the 32nd floor.

The third system covers the rentable spaces in the concourse and first floor. Outside ductwork and chilled water piping to the fan rooms will be installed, and conventional air handling systems for the various stores and other spaces will be added later.

For the conventional air conditioning systems the outside air quantities are based on a minimum of 25% of the total air handled. For interior systems during the intermediate seasons half the air handled will be outside air. The outside air intakes for the future systems on the concourse and first floors have been designed to handle up to 100% outside air during the intermediate seasons.

Dividing the air conditioning into three parts is believed to be a logical way of meeting the problem, because each space requires a separate solution. The window units, equipped with individual fans, eliminate the need for radiators or convectors. These units also provide individual control for the outside rooms—where it is most needed. A third advantage is that duct sizes can be reduced by more than half since the capacity is sized to handle only outside air.

The interior areas, relatively unaffected by sun or orientation, can be handled best and most economically by a separate conventional system. The store areas on the lower "public" floors are generally not completely rented until the building is almost finished, and are best treated individually.

Key to the system for conditioning peripheral spaces will be the Chrysler Airtemp individual room units. One complete unit will be placed under each window, but a single cabinet will cover the entire space between columns, thus housing two units. Each unit will be equipped with an automatic valve so that it may be individually controlled if necessary.

### ALLOW FOR CHANGE IN PRESSURE

The entire air conditioning system will be regulated by Minneapolis-Honeywell pneumatic controls. Two electric compressors, each with sufficient capacity to operate the controls, will supply compressed air. The controls are designed to take into account the change in pressure when a switch is made from summer to winter operation.

It was determined that it would be more economical to purchase steam from the New York Steam Co. than to generate it in the building. Steam will be brought into the building at 125 to 150 lbs. pressure and used at full pressure to run the steam turbines which drive the refrigeration compressors.

The 1,400 tons of refrigeration the building will use will be produced by two centrifugal compressors, using "Freon-11" as the refrigerant. Each will produce 700 tons when cooling 1,400 g.p.m. of water from an initial temperature of 54° F. to a terminal temperature of 42° F. when the condenser is supplied with 2,100 g.p.m. of water at 85° F.

Each chiller will be designed for the circulation of 1,400 g.p.m. The condensers will be designed for the circulation of 2,100 g.p.m. each at an entering temperature of 85° F.

Three cooling towers will be able to cool 1,400 g.p.m. from 105° to 85° F. when the outdoor wet bulb temperature is 78° F.

Care was taken in the design to eliminate all noise and vibration from the air conditioning systems. Flexible hose will be installed at all pump suction and discharges, and vibration isolators will be put under all machines with moving parts.

## Trend Toward Cooling as Well as Humidity Control In Textile Plant Installations Noted by Carrier

SYRACUSE, N. Y.—Two thirds of all major new textile industry air conditioning installations sold by Carrier Corp. since the beginning of 1950 have involved refrigeration as well as humidifying equipment, the company has disclosed.

A survey of this booming trend toward positive temperature control covered well over a hundred textile industry contracts totalling many millions of dollars, which had been placed with Carrier during the year and a half period.

Virtually all new air conditioning systems for knitting mills, and for twisting, throwing, sizing, and coning operations included refrigeration for temperature control, as well as air washers and humidifiers and other conventional equipment.

In the spinning and weaving sections of the industry, installations calling for evaporative cooling without refrigeration have dropped from 64% in 1950 to 23% since the beginning of 1951, with more than 76% of the major new systems providing for refrigerated cooling. In some cases refrigeration was added to existing evaporative cooling systems.

The major portion of the thousands of tons of refrigeration capacity included in the year and a half list will be supplied by centrifugal refrigeration machines. One installation alone totals 2,200 tons of capacity—the equivalent of a block of ice 12 ft. square and nearly as high as the Washington Monument melting every 24 hours.

Many of the biggest names in the industry are included in the recent boom for refrigerated temperature control. Among them are Burlington Mills, Lexington, N.C.; Robbins Mills, Raeford, N. C.; Greenwood Mills, Greenwood, S. C.; Stonecutter Mills and Spindale Mills, both in Spindale, N. C. Deering Milliken is represented by Judson Mills, Greenville, S. C.; Gaffney Mfg. Co., Gaffney, S. C.; Hartsville Cotton Mills, Hartsville, S. C.; and Kingsley Mill, Thomson Ga.; J. P. Stevens & Co. by its Carter Fabrics division, Wallace, N. C.; and Milledgeville Mills, Milledgeville, Ga.; and Vanity Fair by Escambia Industries, Atmore, Ala.; and Clarke Mills, Jackson, Ala.

Hosiery manufacturers include McCrary Hosiery Mills at Asheboro and Ramseur, N. C.; Lynchburg Hosiery Co., Lynchburg, Va.; and Asheville Hosiery, Asheville, N. C.

Carrier's analysis pointed to basic economic factors as reasons for the trend. The high equipment speeds and increased lighting necessary for intensified production add to the heat loads inside the plant. At the same time, the lower humidities required in many cases for synthetic fibers have reduced the amount of cooling obtainable with evaporative cooling systems.

Machines operating at high speeds and fine tolerances using fibers subject to changes in elasticity must be kept at fairly constant temperatures to avoid seconds or shutdowns for readjustment.

And with labor costs becoming an increasingly large part of the total production cost, more stress has been placed on efficient working conditions to increase alertness and capacity to work and to reduce absenteeism.

The analysis of Carrier textile industry jobs for the 18-month period shows installations of special self-contained laboratory units for textile testing rooms, and of heating and exhaust systems for eliminating dye-house fog and condensate problems. Also, a number of contracts were signed for revisions and extensions of existing systems, in addition to the major new air conditioning installations.

### Russ and Dorothy Gray To Distribute Airtemp In Fla.

MIAMI, Fla.—Russ and Dorothy Gray, air conditioning and major appliance distributor here, has recently announced its appointment as distributor of the Chrysler Airtemp line of packaged air conditioning units.

Having handled the Fedders line of room units for a number of years, the firm can now offer its dealers units ranging from 1/4-hp. to 11 tons capacity.

### JUST ASK US!

Turn to "What's New" Page for useful information on new products.

## Want Better Diaphragm Performance?

Get  
**KEROTEST**

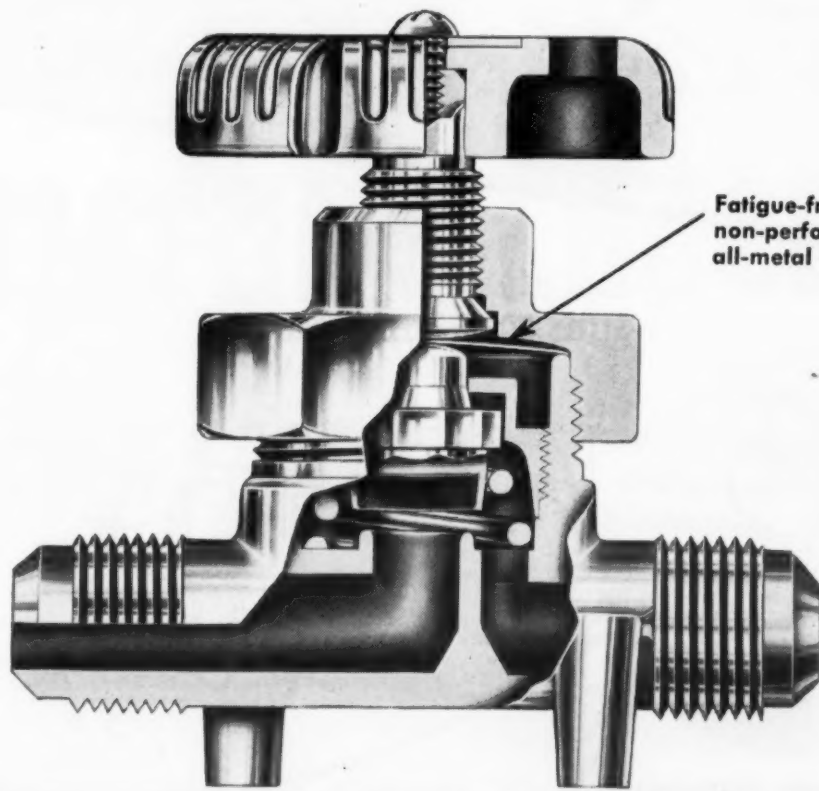
Original

DIAPHRAGM PACKLESS

LINE VALVES

Check these  
"Extra Value" Features

- ✓ **FULL FLOW**—wide passages, unrestricted flow pattern assures minimum pressure drop.
- ✓ **REDUCED SERVICING**—fatigue-free, special alloy, non-perforated diaphragms practically eliminate replacements.
- ✓ **FOOL-PROOF**—metal-to-metal seal back seating features permits safe diaphragm replacement under pressure if ever needed.
- ✓ **INSTALL FASTER**—special extended leg holds the mounting screws while you drive them. Prove this yourself!
- ✓ **CONVENIENT**—comfortable handwheel design permits easy operation from all positions even in cramped quarters.



Always Extra Value

at No Extra Cost

**KEROTEST**

Manufactured Exclusively by

KEROTEST MANUFACTURING CO.

PITTSBURGH 22, PENNSYLVANIA

## Another Haertel Air Master DEHUMIDIFIER



BY THE MAKERS OF THE FAMOUS "VAULTMASTER" DEHUMIDIFIERS, STANDARD IN MANY INDUSTRIES SINCE 1938.

AIR-MASTER model 50-B is a new advance in the art of drying air mechanically. Its "Ratio Damper" gives peak performance at any space temperature from 65° to 95° F. A third heat exchange element permits a part of the work done in cooling the entering air down to dew point, to be recovered. This cuts down refrigeration load. The 50-B challenges all competition for efficiency and economy.

Protect critical equipment and materials from moisture, damage by RUST, MOLD, MILDEW, ROT, WARPING, TARNISH, CORROSION, CAKING.

SEE THIS AND OTHER MACHINES IN THE HAERTEL LINE. YOUR INQUIRY INVITED. WRITE TODAY.

**WALTER HAERTEL CO.**

2840 4th AVENUE SOUTH, MINNEAPOLIS 8, MINN.



## Merchandising Touches

# Niceties In Display, Handling Lend Special Appeal; Increase Sales of Self-Serve Meats

HUTCHINSON, Kans.—A close study of the average housewife's preferences in buying self-serve meats will invariably result in the adoption of "merchandising touches" which can sharply increase volume, according to Ray E. Dillon, Jr., of J. S. Dillon & Sons Stores Co. here, operator of 25 supermarkets in the western Kansas area.

"Self-service alone is no longer a novelty," Dillon indicated, "and invariably it will be found that a housewife prefers to shop at one self-service meat market over another because of niceties in display and handling, which lend special appeal."

"Therefore, we have never considered that self-service alone was enough. Through recent years, we have developed some changes which we feel have increased sales in each store."

Here are some of the improvements:

1. All meats are boned out, with no fat shown unless it is essential to the flavor of the meat.

Selling every sirloin, for example, as a boneless cut, has more than tripled turnover in this particular item. Again, in cutting a 7-in. bone-end steak, Dillon stores bone out the first three prime ribs, which, thickly cut, provides a delicate flavor when broiled.

2. Packaging is made to do more than show off the meat.

Dillon's uses a variety of packages for different cuts of meat. With meats likely to bleed, a crinkled paper underlayer is always provided in the tray, between the backboard and the

meat, to absorb the excess blood. This removes any unsightliness in the package, and keeps the meat fresh and bright looking. Also, in addition to the usual weight and price information, the label on sliced meats tells the number of slices.

3. Luncheon and smoked meats are displayed upside down.

Like many supermarket operators, Dillon's has found that delicate-flavored luncheon meats, when sliced and exposed to light, will discolor and otherwise become unattractive. So packages are turned upside down. When the customer turns the package over, the appearance of the meat is at its best, and "buy-appeal" is guaranteed. Labels are applied to both the back and front.

4. "Better" arrangement of meats.

The Dillon stores disagree with other supermarket operators who believe in spotting all low-cost "economy meats" at one point.

Thus, the first case the customer visits when coming from the grocery department, displays ground meats, including sausage, ground beef, hamburger, chuck, and ground steak. If the low prices featured here please the customer, the chances are that she will "experiment further" and pay more attention to prices in the remainder of the self-service cases, Dillon believes.

Arrangement likewise includes contrasted beef and pork cuts, which makes for pleasant eye-appeal, and likewise puts a lot of emphasis on the fine uniformly high-quality meats carried.

Immediately following the roasts

next, the Dillon stores show variety meats, which, because of the large numbers of flavors and special choices involved, sell rapidly.

5. Delicatessen case and special services.

In all Dillon markets, a case of delicatessen items, prepared in the store's own kitchen, is always centered in the meat department. Here shown are such familiar items as cottage cheese and potato salad.

One of the most important traffic-builders has been a policy of roasting hams, beef, and pork roasts, poultry, etc., which the customer may order at a nominal charge for parties or other large events requiring food service. The hot meats, as they come from the store's oven, are placed in electric roasters, sent to the customer via delivery truck.

6. Special emphasis is placed on advertised cost-savers.

Dillon's uses large red plastic arrows, identified with the words "As Advertised" to point out specials for the day. The pointers are attached by magnetic disks to any part of the self-service cases.

## Used Refrigerators Lay Groundwork for New Box Sales

HAMILTON, Ont., Can.—Reconditioned used refrigerators serve to bring customers to Mills Electric, 749 King East, and lay the groundwork for sale of new units at a later date.

The firm offers a one-year guarantee on every reconditioned refrigerator and anytime during the first 10 months of ownership, the customer is given the privilege of buying a new box with an allowance of the purchase price of the used refrigerator.

"It's just like having free refrigeration for practically a year," the firm says in promotional material.

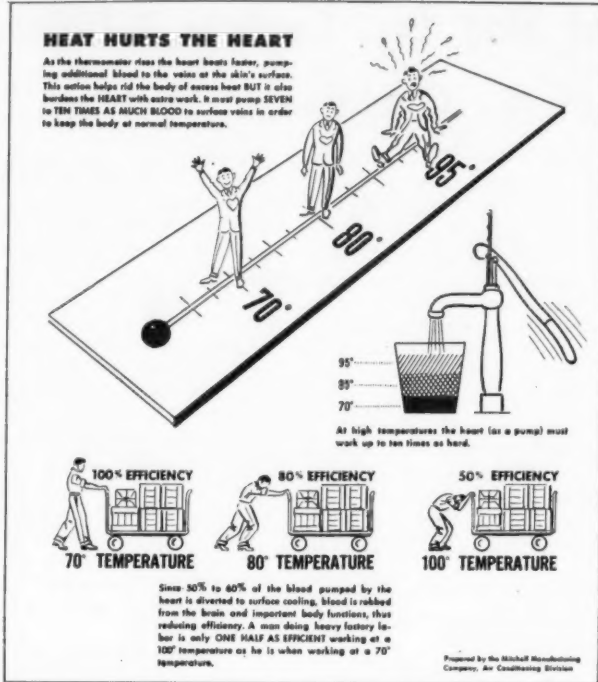


CHART prepared by Mitchell Mfg. Co. to point up the effect of heat on health and efficiency.

## Mitchell Chart Gives Facts on Heat and Heart

CHICAGO—The facts on heat at a glance are presented in a concise chart prepared by the air conditioning division of the Mitchell Mfg. Co., here.

The chart, which warns to "Keep Cool—You'll Live Longer," shows in graphic and pictorial form how heat affects the heart and thus the efficiency of the body.

The information has been sent to newspapers throughout the country, and plans are being made to reproduce it in handout and window streamer forms for use by air conditioner distributors and dealers.

## Hotpoint Plan Aims at Equipping All Schools With Electric Kitchens

CHICAGO—Aimed at "equipping every school and college with all-electric test kitchens," a new plan for educational institutions in which dealers, electric companies, and distributors will participate, has been started by Hotpoint Inc., Edward R. Taylor, vice president, announced.

The plan provides for equipping home economics departments of accredited universities, colleges, extension courses, high schools, and elementary schools with complete kitchens and home laundries, at approximately half the retail price.

Under the program, the appliances are replaced yearly with new models at no cost to the school except installation. The plan also provides for servicing the appliances in use, under terms of the regular warranty.

Taylor said that in most cases, sales will be handled by distributors, who will offer trained kitchen planning specialists to assist in modernizing school facilities. Hotpoint is conducting a series of planning schools throughout the country to which home economics staffs are invited.

The Hotpoint Institute, in addition to holding regular instruction classes, has prepared a new series of use-value manuals that are available for home economics departments. The institute also prepares appliance instruction books, educational sales films, classroom teaching aids, and news periodicals that go to teachers and other home economists.

Hotpoint has a similar sales plan covering commercial cooking equipment for institutions offering courses in restaurant management and related subjects. Commercial "kitchen planning" service is available for this type of installation.

## Unbaked 'Pantry Pies' Stay Fresh 10 Days In Refrigerator

SYRACUSE, N. Y.—Another boost for home refrigeration is seen here in the successful marketing of a new kind of unbaked pie.

The new product is called "Pantry Pie" and is being produced and sold by Mohican Markets. It isn't a frozen or pre-cooked pie. It is a pie all made, ready to be baked, and due to a patented process, will reportedly keep fresh for a week to 10 days under refrigeration.

## Rochester Opens Bids on Refrigerators, Ranges

ROCHESTER, N. Y.—City Purchasing Agent Fred W. Erath opened bids on contracts to furnish 398 new electric refrigerators and the same number of gas ranges for the B. den-Ormond housing project.

Chapin Owen Co., Inc., was low bidder on the refrigerators with an offer of \$114.98 per unit for a total of \$45,187.14. Seven bids were submitted.

Alhart Electrical Co. was low bidder on the gas ranges with a bid of \$45.95 each for a total of \$18,083.55. Six bids were received.

# "This is It!" THE SHERER

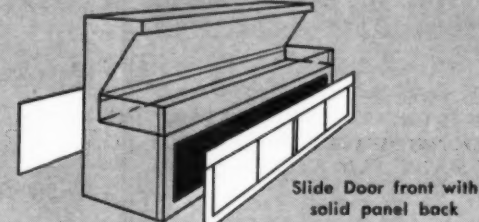
Here's an open display case that you can sell because you can make it fit your customer's individual needs exactly. With the **NEW** Sherer Model UL2710-C YOU CAN:

- 1 add or subtract whatever you need to fit the requirements of your customer's store
- 2 create 12 different body styles
- 3 change it on your floor — before you deliver it
- 4 or you can change it, at any time in the future — right in the user's store.

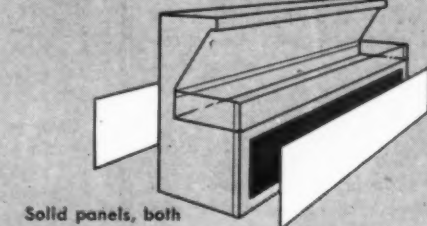


MODEL UL2710-C

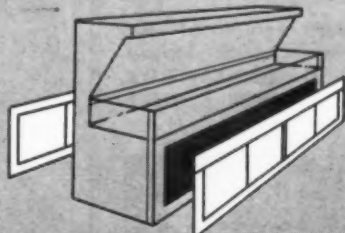
Solid front with slide door back



Slide Door front with solid panel back



Solid panels, both front and back

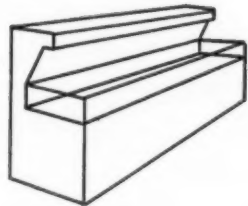


Slide Doors both front and back to make it a "pass through" Case

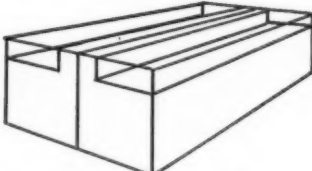
## 3 STYLES OF SUPERSTRUCTURE



High canopy with **Sliding Mirrors** that multiply the appeal of the merchandise on display—and makes servicing possible from the rear as well as the front



Low canopy with fixed mirrors



Stainless Steel Cap for low cases. Where required, can be used back to back for island display set-up

## 4 CHOICES OF STORAGE BASE ARRANGEMENT

SHERER OFFERS FREE STORE ENGINEERING AND PLANNING SERVICE. Write for details. Also write for details on Sherer's New Finance Plan.

SHERER-GILLET COMPANY  
Dept. AC  
MARSHALL, MICHIGAN



If you want to put the advantages of these new Sherer developments to work for you

WRITE FOR FRANCHISE INFORMATION

Name.....

Address.....

City.....State.....



## Paves Way to Sales

# Renting Air Conditioners Proves Profitable, And 75% of the Units are Finally Bought

UTICA, N. Y.—Rental of air conditioning units paves the way for sales as well as providing a profitable supplementary operation for Governed Air, Inc. here.

The firm has been renting air conditioning units for the past two years and has enjoyed "excellent results," according to John J. Droz, an executive of the firm.

At date, the company has sold about 75% of the units it has rented, and has found a ready rental market for all of its units.

Governed Air, Inc. rents units from 1½-hp. to 5-hp., package units only. It charges these rates per month: 1½-hp., \$20; 2-hp., \$25; 3-hp., \$35; 4-hp., \$40; 5-hp., \$50; 6-hp., \$70; 7-hp., \$90.

All installation charges are extra. The customer must rent the unit for a minimum of one month and the rental fee is due in advance. All charges, including rental and installation, are applied toward the purchase price if the customer decides to buy the unit.

"This idea has paid off very well for us," said Droz. "We are really youngsters in this business. The average age of our staff is 30 years and this is our fifth year in business."

The firm has gotten over its rental service story to the public principally through a series of small but impelling newspaper advertisements which are concentrated through the hot weather season.

These advertisements approach the subject of rented air conditioning from a variety of angles. One which produced especially good results played up the idea that a person could have air conditioning for a rental cost of only 75 cents a day.

Another was directed at hay fever sufferers and was spotted during the month of August when hay fever hits the Utica area. The advertisement was headed by the caption: "Hay Fever?" Copy continued: "Now you can get relief . . . call us today for details. Rent an air conditioning unit. All sizes . . . for your home, office, or store." The firm's telephone number appeared at the foot of the advertisement.

Still another approached the subject from a more general standpoint, using the caption: "You can rent air conditioning, any size, for your home, office, or store. Just phone 4-5514."

The Governed Air, Inc. promotional program on rented air conditioning shows the pulling power of consistent newspaper advertising, even though the advertisements are small.

You can RENT  
• air  
conditioning

Any Size — For Your Home,  
Office or Store.

Just Phone: 4-5514  
GOVERNED AIR, Inc.

## School for Engineers In Textile, Tobacco Plants Features Refrigeration

WINSTON-SALEM, N.C.—Annual classes staged here by the Bahnson Co. chiefly for operating and maintenance engineers in the tobacco and textile industries will place greater emphasis on refrigeration this year, indicates Frederick Boxall of the Bahnson engineering department.

"There have been further requests that refrigeration be stressed more strongly due to the fact that manufacturers are becoming conscious of its uses," he says.

These classes will be held at the Robert E. Lee hotel here the weeks of Oct. 1 to 5 and Oct. 15 to 19. The first week will be primarily devoted to evaporative cooling while the second will cover refrigeration.

No charge is made for the classes, but living expenses of individuals attending must be provided by themselves or their employers.

In its announcement to such companies Bahnson points out that "these classes are designed to assist your operating personnel to become more familiar with the air conditioning and refrigeration under their care. Reports from previous years have indicated a marked improvement in the care given this equipment."

Program for the first week's classes (devoted largely to evaporative cooling) calls for a brief review of the history of air conditioning and a discussion of air washers by Boxall, Monday morning, Oct. 1, followed by an afternoon session on "Humidifiers" by W. Cooper of Bahnson.

On Tuesday cleaning equipment will be discussed by W. A. Baltzell of Oakite Products; atomizers by W. Avera of Bahnson, and pneumatic controls by S. Oliver of Johnson Service Co.

Wednesday will be devoted to talks on electric controls by Minneapolis-Honeywell; electric motors and starter equipment by Allis-Chalmers, and an evening visit to the Bahnson plant.

On Thursday I. W. Leggett of Worthington Pump & Machinery Corp. will discuss pumps, V-belt drives, and air compressors; and on Friday R. H. Hayman of Betz Engineering will discuss water treatment; R. K. Hunter of Marlo Coil, coils; E. DeWitt of American Blower, fans; Boxall, air filtering equipment and grilles. A banquet Friday evening concludes the first week's classes.

The refrigeration classes starting Monday morning, Oct. 15, will open with a review of principles of refrigeration followed by a discussion of refrigerants. Evaporators and compressors will be taken up by Worthington in the afternoon; soldering and welding by Linde Air Products in the evening.

Condensers and evaporators will continue Worthington's discussion Tuesday morning, to be followed by talks on expansion valves by Alco Valve; cooling towers by R. Baker of Wheeler Cooling Tower Co., and a visit to Reynolds Tobacco Co.

Worthington will discuss testing and charging, service routing, and trouble analysis Wednesday morning, electric motors and starters being reviewed in the afternoon by Allis-Chalmers. A visit to the Bahnson plant is scheduled for the evening.

Centrifugal refrigeration talks by Worthington will take up all of Thursday, while Friday will feature water treatment, air washer, atomizers, and the concluding banquet.

# Compact Arrangement of Refrigerated Fixtures Saves 1 Full-Time Employee

LINCOLN, Neb.—The work of one full-time employee is saved along with a considerable reduction in refrigeration cost by the compact arrangement of refrigerated vending cases at Val's Market, 3457 Holdrege St. here, it was reported by Proprietor Val N. Weiler.

Biggest time and cost savers, he declared are a combination walk-in cooler and an adjacent refrigerated case for vegetables.

The self-service case for dairy products and eggs is built into the face of a 10 by 6-ft. walk-in cooler. The combination unit was manufactured by the C. L. Percival Co. of Boone and Des Moines, Iowa.

The time-saving arrangement begins with the location of the walk-in box, Weiler explained. It is located adjoining one end of the Koch meat case, so that the walk-in door is immediately off the refrigerated meat display fixture, while the front end of the cooler is in line with the meat case, thus facilitating shopping for customers.

The dairy products case has five shelves and four sliding doors to cut down the refrigeration load. It has a stainless steel front trim to make it a more attractive display fixture.

A two-foot opening at the top of the partition between the dairy case and cooler is provided for circulation of conditioned air. A blower fan mounted in the cooler serves both the storage and vending sections, and the entire load is carried handily by a



MONEY AND SPACE saving arrangement of dairy case incorporated into a walk-in cooler is pointed out by Val N. Weiler, proprietor of Val's Market.

1½-hp. water-cooled compressor.

The combination unit saves considerable money, both in initial investment and refrigeration upkeep.

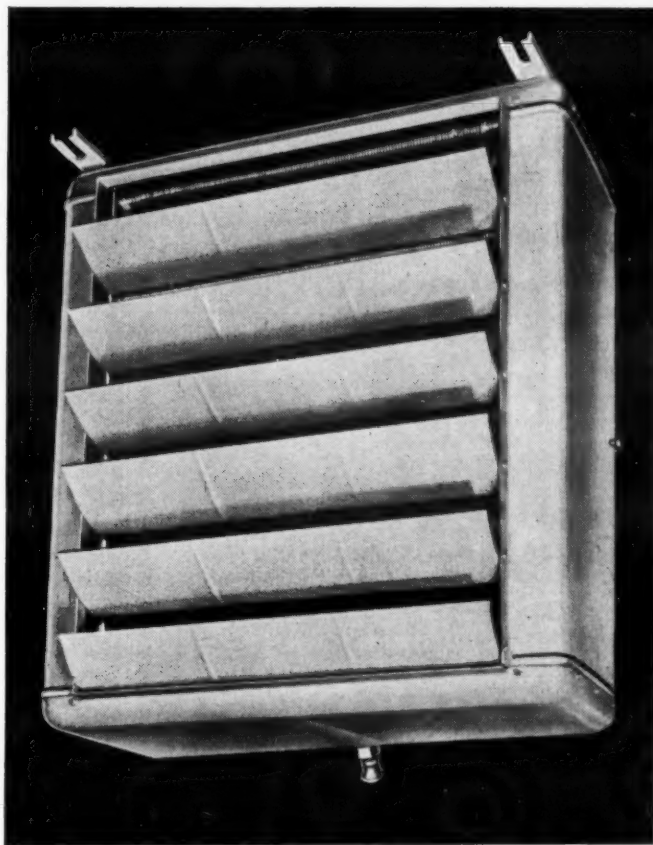
The store also recently added another Percival case for refrigerated display and storage of vegetables. This case alone has saved the work of one man in addition to reducing spoilage by approximately 20% on such items as green vegetables, avocados, and berries. The fixture has been located along the wall at right angle to the dairy case for convenience of customers.

Weiler asserted that the use of new refrigerated display equipment designed to facilitate self-service and save steps for the grocer is essential

to the profitable operation of the small food store today.

Such equipment helps materially in solving the personnel problem, and at the same time cuts down spoilage of perishable foods and increases store traffic, both from the standpoint of improved appearance and the better quality of produce vended under refrigeration.

Other refrigerated fixtures employed at Val's Market include a six-foot section for packaged ice cream and frozen foods, and a four-foot section for self-service of cold bottled soft drinks. Both of the latter counters have been installed near the check-out counter where Weiler has found impulse sales are highest.



For  
LOW COST

Air  
Conditioning

the

KRAMER

COMFORT COOLER

WITH A

FILTER!

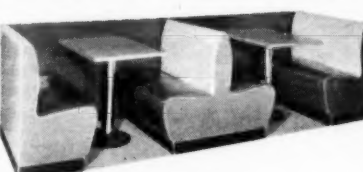
Practical for many applications, it is ceiling-mounted and uses no floor or wall "pay space." It eliminates costly ducting. The FILTER keeps the coil free of all dust and grease.



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BULLETIN AC-171

KRAMER TRENTON CO. • Trenton 5, N.J.

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double \$59.50 list

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74 different models in stock

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## No 'Info' Monopoly

### NPA Inquiry Center In Washington Has The Answers—So Do District Offices

WASHINGTON, D. C.—On your way to Washington? To get an interpretation of an order by the National Production Authority, to find out what happened to your CMP-4B form, or to solve some problem involving critical metals?

Then jot down this address for your first stop:

Old GAO Bldg.,  
Fourth and G Sts. N.W.  
Washington, D. C.

There, in the main lobby, you will find the reception unit of the NPA's Business Inquiry Center. There you state your problem to the helpful receptionist and she will gladly send you on your way—to the person who is most likely to have the answer, that is.

If you are after texts of orders or informational bulletins, she will motion you across the lobby to the center's distribution unit. There you will find copies of all NPA and DPA regulations, directives, press releases, orders, and publications.

These are being handed out free at the rate of about 1,500 copies daily. About 500 persons stop here daily while about 200 more telephone for information.

Here you can get up to five copies of any press release. But for publications with a price tag, you will be sent across the street to the new GAO building.

If you have a question or problem that needs more personal attention, the receptionist will direct you to the business inquiry unit in room 121. Behind this door you will find 12 industry specialists.

NPA says that each and every one of these specialists has had extensive government experience, many of them with the War Production Board during World War II. Nearly all of them were formerly executives in private business and are thoroughly informed in their respective fields.

You will be referred to the specialist best prepared to assist you. If he doesn't turn out to be the best man with the right answers, all he

has to do is to take you a few desks away to the man who does.

If an interview with some NPA official is advisable, he can arrange it.

This latter assistance is particularly valuable at the present time because NPA offices are in the process of moving into the new GAO building across the street and the exact location of any one of them may be in doubt.

Most of the time, however, this specialist is capable of giving you an answer in a few minutes.

If it is necessary to contact other government agencies to get the proper information, the specialist will do that for you, too. He will tell you just what agencies to go to.

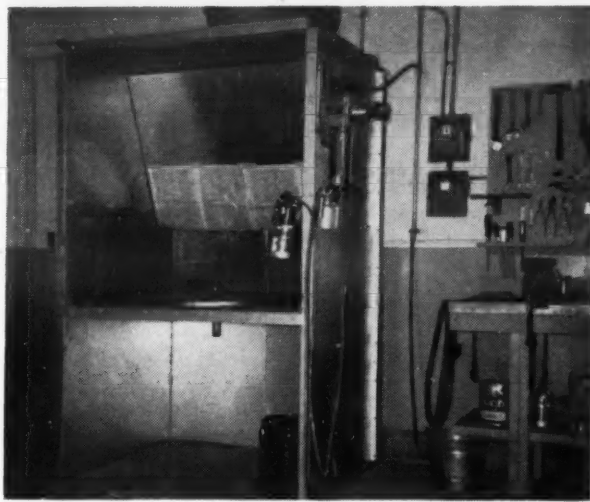
If you are a "hardship" case suffering under the terms of some materials order, the specialist will look very sympathetic, shake his head, and try to point out to you why the government needs the metal more than you do. If you still aren't convinced, he will tell you to whom to make your appeal and the procedure for doing so.

If it is one of the controlled materials—steel, aluminum, or copper—he will even give you a sales talk on using substitute materials.

If you are one who thinks that a long distance call to Washington is cheaper than making the trip, the business inquiry unit's telephone number is Sterling 5200, Extension 3238. The reception unit is on extension 4411 and the distribution unit on extension 4239.

Don't call before 8:30 a.m. E.S.T. or after 5 p.m. Saturday and Sunday calls will rouse no one.

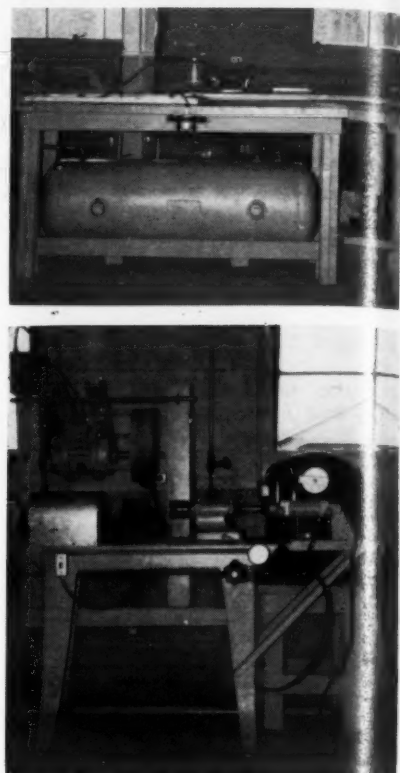
Though all this service is available to Washington visitors and is billed as about the best in these parts, NPA urges you not to use it. Exactly the same service can be obtained in any district office of the Department of Commerce. There are more than 100 of them around the country and much easier to reach than Washington.



ABOVE: Spray booth for painting high sides and evaporators has exhaust fan to remove fumes.

RIGHT ABOVE: Flushing bench for cleaning evaporators and condensers uses Triad which is maintained at 100 lbs. pressure in tank beneath bench.

RIGHT BELOW: Welding stand was specially designed to reweld shell of hermetic units after compressor and motor are rebuilt.



## Factory Methods Used by Hermetic Rebuilder Who Specializes on Norge Units on West Coast

SAN LEANDRO, Calif.—Using methods and machinery patterned after those of the factory, Nord Hermetic Co. here is the only hermetic rebuilding firm in the west that specializes on Norge units exclusively, according to Paul Kunkle and Gordon Leatherman, owners of the company.

Purpose of the firm is to furnish refrigeration distributors, dealers, and servicemen with rebuilt Norge units as replacements for those which are beyond the original five-year factory warranty. An 11-state territory is covered.

Completely rebuilt units are shipped by the Nord firm, generally from a stock kept on hand, and carry a one-year guarantee. This permits immediate replacement, but where the customer's unit must be rebuilt three

days are generally required at the factory.

The sulphur dioxide units made by Norge from 1939 through 1946, for example, are converted to "Freon-12," which means a new and heavier motor winding. Besides a thorough cleaning and rebuilding, units get a new suction and capillary line, new connecting tubing for the condenser, and a new paint job.

"All units must have a new appearance when they leave the shop. This means eye appeal to the customer and an easier selling job for the dealer or serviceman," Kunkle explains.

Kunkle, who is president of Nord Hermetic, spent 22 years with the Norge factory, from 1927 to 1949, and for two years operated a Norge rebuilding plant in Detroit with his brother George. The latter continues to operate the Detroit firm, Modern Refrigeration Co.

At one time Paul Kunkle was assistant national service manager for Norge, and when he left the factory he was engineer in charge of plant maintenance and equipment.

Leatherman, secretary and treasurer of the Nord firm, was formerly employed in the Norge service department in Muskegon, Mich., and has also been an independent service operator.

In rebuilding units—a subject which invariably interests most servicemen—the first step is to pump out all the old refrigerant. The Nord firm does this, Kunkle explains, by connecting the unit to a discharge manifold. A pump on the end of the manifold will evacuate the system to about 28-in. vacuum. Heat is applied to the compressor and other parts of the system by a gas torch to speed the process.

Before the system is cut apart, however, the vacuum is destroyed with dry air or nitrogen.

A large engine lathe is used to cut open the compressor. After the

winding is pulled out of the dome, the compressors are stored in cabinets containing silica gel.

"This prevents them from rusting until they can be worked on," Kunkle says.

The two halves of the dome are marked so that the same parts are matched when reassembled. Then they are cleaned thoroughly inside and out with wire brushes. The matching faces are disc ground to assure a perfect fit with the flat surface extending at least 1/8 in. across. Cleaned domes are likewise stored in a cabinet containing silica gel to prevent rusting.

Rebuilding the compressor itself involves complete disassembly and lapping of all parts to restore the factory finish. Suction and discharge valve seats are lapped and tested separately before reassembly to the compressor.

First test on the reassembled compressor is to turn the rotor by hand with a vacuum gauge connected to the suction line.

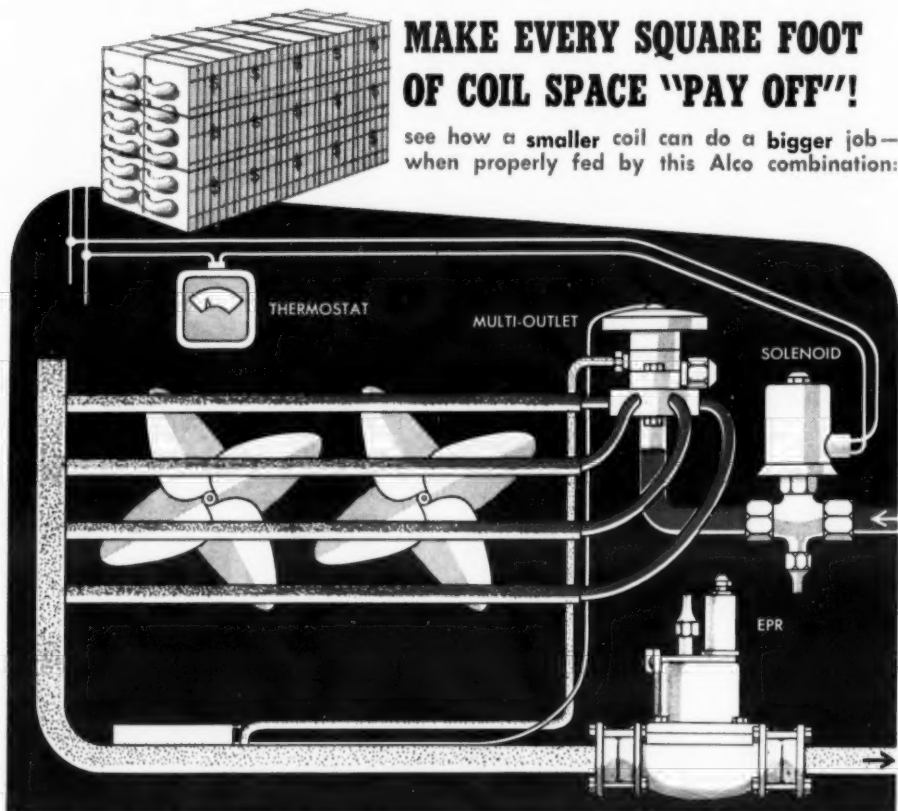
"It must draw at least 29 in. of vacuum and hold it for several minutes," explains Kunkle.

Clean compressors are stored in a cabinet with silica gel until they are assembled in the dome. After the winding is pressed into the dome and new terminals installed, the compressor is bolted in place and run a few minutes by connecting a relay to it. Wattage is checked to be sure the compressor is within proper operating limits.

A special welding stand has been devised for rewelding the shell. After the welding operation the compressor suction tube is soldered in place and the charging valve installed. Compressor is charged with nitrogen to 100 lbs. pressure and submerged in a water tank to test for leaks.

Work on the condenser involves cleaning and attaching of new tubing. The condenser is also pressure

(Concluded on next page)



TYPE "TO" MULTI-OUTLET THERMO VALVE—for individual liquid metering to each circuit. Assures you of equal distribution under high temperature, low temperature, high load, or low load conditions. Eliminates "hunting and cycling"—gives longer compressor life. Simple "come-apart" construction for easy cleaning and maintenance—without removing valve from line. Multi-Outlet valves available with from 2 to 36 outlets.

M635 SOLENOID—positive liquid stop, thermostatically controlled. Dependable, quiet operation—all internal parts made of stainless materials.

EPR 15—evaporator pressure regulator for product protection against de-humidification or "freeze-up". Maintains constant back pressure.

FOR FURTHER DETAILS, SEE YOUR ALCO WHOLESALER—AND WRITE FOR CATALOG #19.



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SPRING-AND-SUMMER 1951  
**DEPENDABOOK** No. 154

OVER 9,000 REFRIGERATION PARTS AND SUPPLIES

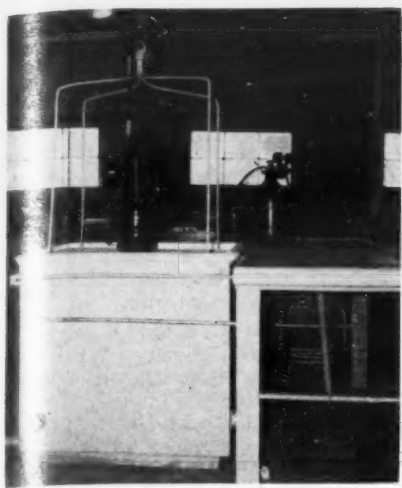
• To successfully conduct a business in these days of scarcities, you really need DEPENDABOOK No. 154...If it's available you'll find it listed in this latest edition.

**WRITE FOR YOUR COPY ...ON YOUR LETTERHEAD**

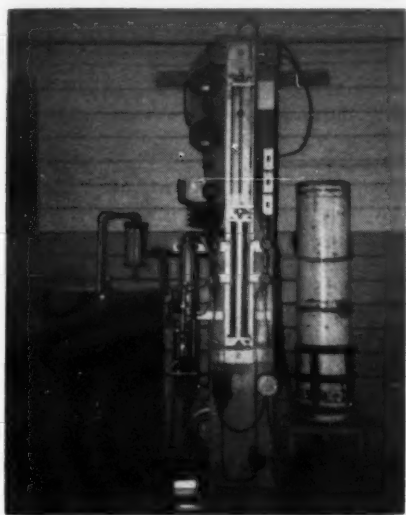
**THE HARRY ALTER CO.** WHOLESALE ONLY  
1728 SOUTH MICHIGAN AVENUE CHICAGO 16, ILL.  
134 LAFAYETTE STREET NEW YORK 13, N. Y.

*"Service doesn't falter when it comes from Harry Alter"*





LEAK TESTING is done in water tank where compressors, and later the complete high side are dunked while filled with nitrogen gas under pressure.



CHARGING BOARD measures exact quantities of "Freon-12" and oil for charging into rebuilt Norge hermetic units.

## Stand for Rewelding Hermetic Shells Devised To Aid In Rebuilding Operation

(Concluded from preceding page)  
flushed with "Triad" (trichlorethylene) before the strainer and drier are installed.

Base is likewise cleaned before being attached to the condenser. This sub-assembly is spray painted and then the compressor is installed, the compressor having been previously painted, too.

After the high side is completely assembled, it is filled with nitrogen under 300 lbs. pressure and tested under water for leaks.

In the meantime the evaporator has been scrubbed and wire-brushed on the outside and flushed on the inside with Triad under pressure. New suction line and capillary tube are installed and the evaporator tested under 150 lbs. pressure. It's sprayed with a special aluminum finish.

When the whole system has been completely reassembled it is placed in an oven which can handle 12 units at a time and dehydrated for six hours at 265° F. A Kinney fine vacuum pump is used to pull the moist vapor out of the units, the pump being required to maintain a 100-micron vacuum for the last hour of the dehydration cycle.

To reduce the moisture content of the vapor remaining in the units, the vacuum is broken twice during the dehydration process with dry nitrogen.

The vacuum is destroyed with "Freon-12" vapor before the units are taken out of the dehydrating oven. When they've cooled to room temperature, the units go to the charging board where a single connection is made so a rough vacuum can be drawn. This is to remove most of the "Freon-12" vapor.

Oil is then put in under pressure supplied by an oil pump connected to an oil drum. The oil is measured through a cylinder which gives one complete charge of oil with each stroke of the piston. Direction of the piston is controlled by three-way valves.

"Freon-12" is charged into the unit under 150 lbs. pressure. The cylinder sight glass is calibrated in ounces, and, according to Kunkle, it is possible to charge accurately to within 1/4 oz.

Following the charging operation, the units go into a heated test room that is insulated and separated from the shop. Here they operate for at least eight hours or overnight. Wattmeter mounted on the wall of the test room is so connected that by pressing the proper button beneath it a reading can be taken on any one of the 15 units that might be in operation.

Final step is to stamp and tag the rebuilt units and crate them for shipment.

## Electric Motor Mfrs. Plead for More Materials

WASHINGTON, D. C.—A plea by an industry advisory committee of electric motor manufacturers for increased allotments of controlled materials in the future was under consideration by the National Production Authority.

The committee said manufacturers would not be able to turn out enough motors for the defense program unless they are granted greater allotments.

Committee members pointed out that 85 to 90% of the orders manufacturers have on hand are defense-related, and that the number of rated orders they are asked to accept is increasing steadily. However, fourth-quarter allotments are expected to total about the same as those for the third quarter, they said.

Interested in insulation from the manufacturing, application, specification, distribution, and end-use viewpoint," said John T. Evans of the society. "Leading industrials in the greater Philadelphia area are represented.

"By accumulating information gathered by these various groups the society plans to serve a long-recognized need for insulation specifications based on a broad knowledge of engineering, theory, and practice.

"Furthermore, by promoting a better understanding between manufacturer, applicator, and final consumer, there will develop better products, better methods of application, and more intelligent specifications."

## Wilson Resigns as Head Of Electrical Institute Of the Tri-Cities

NEW YORK CITY—H. P. Wilson, president of the International Association of Electrical Leagues, had to vacate his office after resigning from the management of the Electrical Institute of the Tri-Cities, the IAEI announced recently.

J. G. Waddell, IAEI vice president, moved up to fill the vacancy.

The remaining members of the board of governors then elected R. B. Hubbard, IAEI treasurer, as vice president and E. J. McGinnis, business manager of the Cincinnati Electrical Association, to the directorate. Hubbard continues as treasurer.

These men will serve in these positions until the annual election of officers, which will be held during the 16th annual conference scheduled for Oct. 13 in the Roosevelt hotel, New Orleans.

## M-H Adds 33 New Sales Engineers In 23 Cities

MINNEAPOLIS — Minneapolis-Honeywell Regulator Co. has added 33 new sales engineers in 23 cities throughout the country.

The entire group, it was announced by William H. Steinkamp, field sales manager of the company's Brown Instruments division, recently completed a comprehensive course in industrial instrument maintenance and repair. Classes were held at the Brown division school in Philadelphia. The men and cities to which they were assigned are:

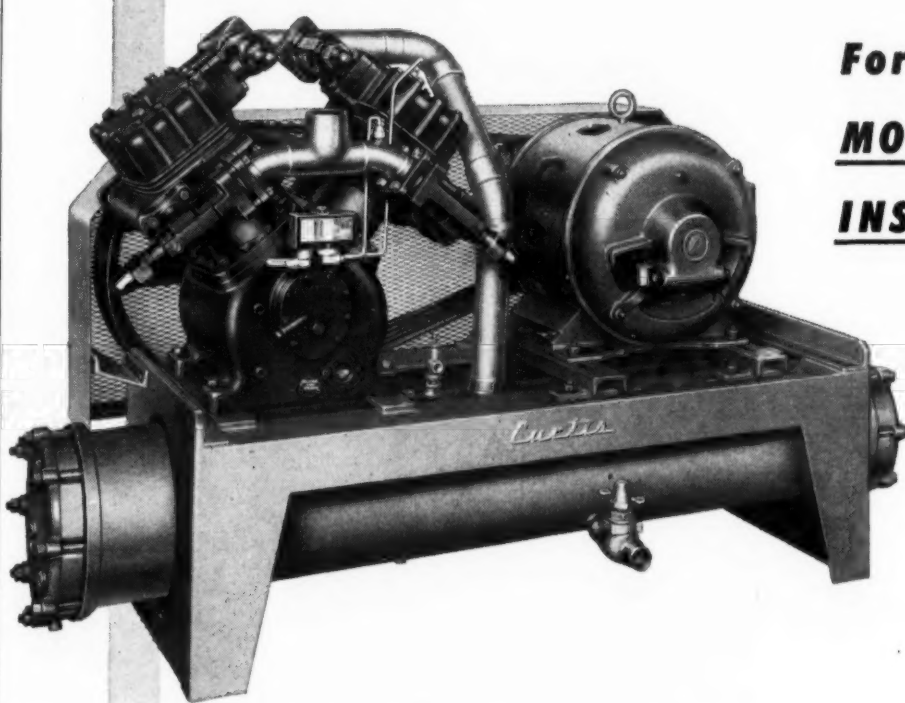
Albert F. Sommer, New York City; John E. Tutty, East Orange, N. J.; James V. Collins and Robert F. Trump, Boston; Walter J. Loughran, Providence; George S. Raab, Hartford; John M. Caylor and George A. Stifflinger, Philadelphia; David Y. Drummond, Wilmington; Roy W. Freeman, Atlanta; Charles O. McAttee, Jacksonville; James T. Emerson, Greenville; and Robert D. Clarke, Mobile.

Donald P. Moreland, Cleveland; Joseph A. Hamblin, Columbus, Ohio; John E. Flaherty, Dayton; Jack W. Larsen, Wilton, A. Bass, and Vendel W. Immel, Detroit; Thomas H. Jenkins, William H. Johnson, and John L. Matter, Chicago; Paul K. Webster, Indianapolis; and Philip A. Barker, St. Louis.

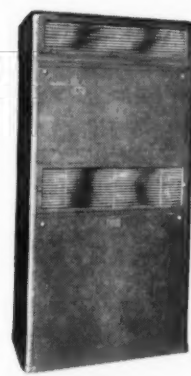
Malcolm L. Johnson, Twin City; Warren G. Hardy, Carl T. Stevens, and Herman R. Hampton, Houston; Bernard J. Alberts and Julius H. Matherne, New Orleans; George W. Leggett, Tulsa; and Frank G. Fischer and Michael J. Joncich, Los Angeles.

# NOW A 40 H. P. CURTIS

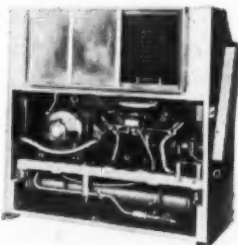
## WATER-COOLED CONDENSING UNIT



For **LARGER,**  
**MORE PROFITABLE**  
**INSTALLATIONS**



Packaged Type,  
2, 4, 6, 8 Tons



Central Type,  
10, 15 Tons

Some of the advanced design features that have made Curtis units so popular with the trade and the user in these larger models are:

- TIMKEN BEARINGS — LESS FRICTION — Easier adjustment.
- PRESSURE LUBRICATION — With low-pressure safety cut-out.
- SLOW-OPERATING SPEED — Economical — More capacity — Long Life.
- UNLOADED STARTING — 3-step capacity reduction

Complete range of condensers for any requirement.

Pin this to your  
letterhead and mail

R-51-3

With the broad Curtis line, you can handle all of the more profitable air conditioning and refrigeration installations. A limited number of franchises are open.



# Curtis

97 Years of Successful Manufacturing

CURTIS REFRIGERATING MACHINE DIVISION  
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1912 Kienlen Ave., St. Louis 20, Mo.

I am interested in Curtis line.  
Please send me complete  
information.

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IN COOLING WATER

## controls scale and corrosion

IN  
EVAPORATIVE  
CONDENSERS  
COOLING TOWERS  
EVAPORATIVE  
COOLERS  
HUMIDIFIERS  
AIR WASHERS

Whittle service calls to the bone with money-saving, equipment-saving Micromet. Leading air conditioning engineers and manufacturers use and recommend Micromet... a slowly soluble vitreous phosphate introduced automatically into the water supply through simple, durable, inexpensive feeders.

**FREE** AIR CONDITIONING BOOKLET  
discusses realistic, practical ways to  
solve water troubles. Write for it. If you have a specific problem,  
tell us about it... and see how easy it is to solve with Micromet.

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## INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

### Not Superstitious, But...

April 16 he buried his first wife.

June 16 he ushered a second bride into his spacious home.

June 17 the second wife, who hadn't cased the joint previously, love-dovied that she'd like some changes made. The furniture was all wrong, that wallpaper in the dining room was an eyesore, etc., etc.

"Sweetheart," indulged the remarried guy, "redecorate to suit yourself. My house is your house now."

They embraced fondly.

"Er, one little thing," interposed hubby. "All my first wife's effects are gone save one hat I'm sentimental about. Please leave it on the upper shelf of the closet in the master bedroom."

She did.

August 16 he buried Wife No. 2.

September 16 he married again.

Same story, except this time there were two sentimental hats he didn't want disturbed.

"Okay, honeybun," grimaced the third bride, who'd been briefed on the unlucky history of his previous wives. "But I guarantee you, the next hat on that shelf will be a felt Homburg."

### Visual Evidence

This is a true story. It happened in a field office of the Federal Security Agency.

A spruced-up, peppery old man filed an old-age benefit claim for his wife. He couldn't produce her birth certificate, he begged, because it had gone up in flames when their house burned down.

"Gotta have proof of her eligibility," countered the testy interviewer. "Surely there's some way your wife can show her age."

"She shows it enough," harrumphed the octogenarian.

### Voices In the Night

Soft and sweet was the radio music, and longtime-married Jimmy felt both romantic and eloquent.

"Hortense," he purred, "if I could turn the Clock of Time backward, guess whom I'd marry."

"Who?"

"You!"

"Me? Oh, no. Not unless I was drugged!"

And that's why Jimmy became a bartender's best friend.

### Might as Well Face It

"Honey," cooed Henry's girl friend, "there's a beautiful diamond-studded wristwatch down at the jeweler's..."

"Sorry, dear," replied Henry, "but dire financial straits prevent an expenditure of that sort *pro tempore*."

"Huh?" queried Girl Friend. "I don't get it."

"Yeah, that's what I mean."

### Other Side of the Forest

"Don't be foolish, dear," tut-tutted Mr. Vandefeller, upon learning that his wife wanted her portrait painted by a struggling young artist. "I can afford the best."

"Let me send you to Europe and hire one of the Old Masters, like that Rembrandt."

### Delayed Devastation

"And why, Madame, do you wish to communicate with your dear, departed husband?" the spiritualist medium inquired, prior to the seance.

"That no-good Soandso up and died while I was still talking to him," belligerated the widow. "I didn't get a chance to tell him that he was an unromantic, unsatisfactory, useless, poor-specimen twirp."

### Time Out for a Smoke

Upon returning from her honeymoon Hortense was badgered with questions.

"Does he try to make you obey him?" probed a girl friend who was still single.

"Don't be foolish. 'Course not. He knows better, on accounta this is his second marriage."

### Do Women Talk Too Much?

Sam was a peculiarly laconic fellow. Seldom did he deign to utter more than a brief "yep" or "nope" when somebody spoke to him. His wife, in contrast, was continuously sounding off about something or other.

"Yakety yakety yakety..." he would mimic while pretending to lis-

ten to Mrs. Sam. "Her and her big mouth," he'd mutter to himself.

Vacation time rolled around, and Sam announced that he'd had enough. He flatly refused to take his wife along on their yearly trip.

"Can't stand that big mouth of your'n and that constant 'yakety yakety yak'..." he told her. "I need a vacation from you. Me and my daughter will go East—you go somewhere else."

And that was that.

To tell the truth, Mrs. Sam was delighted at this turn of events. She was still attractive and, like most women, yearned for Romance. At last, she thought to herself, I can have fun alone. And she airplaned to Florida.

As Sam and his daughter waited for their train at the depot, two masked robbers staged a sudden hold-up, and departed with all the men's money and the women's expensive finery and luggage.

"They took everything we had on us," grumbled Sam, after the exciting ordeal had ended.

"Oh, no, dad," corrected his daughter regurgitating into her palm. "I put all my jewelry in my mouth, and here it is!"

"Good for you," congratulated her father. "If your mother hadda been here, we coulda saved the trunks, too."

### The Cutter Knew Him

Paul Provider was killed in an automobile accident. His widow went through the agony of purchasing a tombstone for her beloved's grave. After selecting the monument she instructed the cutter to inscribe the words "to my husband" in a suitable place.

Several days later she was shown the completed tombstone. Promptly she had hysterics. The engraved inscription read:

"To My Husband

"In a Suitable Place."

### Other Types of Women

"Vot are you likink for your birth-day prezunt, mine darlink?" hinted Brooklyn Ben. "A chinchilla coat?"

"Uh-uh."

"A nize, new Cadillac converti-

ble, mebbe?"

"No, Ben. Just gimme cash."

"Hey, Delilah," exasperated Ben, "how can I be gettink cash WHOLE-SALE?"

"Men are so helpless!" opined Martha to the members of her bridge club. "Why, my Larry would starve in the midst of a supermarket full of groceries if I weren't there."

"Same here," agreed Edith. "Vincent can't even open a can of beans without my help."

"Humph!" snorted Dorothy, "talk about being helpless! Why, every time Theodore irons his shirts, I have to adjust the iron for him!"

### Give Him a Chance, Hey?

"Every morning," petulated Rosalie, "our next door neighbor kisses his wife passionately before he leaves for his office. And he does it in broad daylight, too. Why don't you?"

"Don't be silly, Rosalie. I haven't met her yet."

### Remember?

Stormed Father:

"Peggy is much too young to get married. She just thinks she's infatuated with that young whippersnapper. She oughtta wait until she meets the right man for her. And another thing..."

"Wait for the right man?" cooed Mother. "Why? I didn't."

### At Long Last!

All afternoon the neighbors had been kibitzing on a hot and heavy battle between Mr. and Mrs. Spatsberg. Effusive epithets were interspersed with the flailing of crockery and light furniture. At long last the violence subsided for a moment, and silence ensued—until Mrs. Spatsberg spluttered:

"I've had enough. I'm leaving."

Clearly audible to the neighbors was a long masculine sigh, then:

"You are, dear? How soon?"

### Poor, Dumb Boy!

Joe showed up at the office with a "beaut" of a black eye.

"My wife asked me," he explained, "what Betty Grable had that she didn't. I told her."

### Insult Supreme

"I forbid you," thundered a panting new husband, "to wear that skimpy, chorus-girl costume. Why, you're practically nude."

"Honey," wheedled wife, "it's only for one night, and the proceeds of our show go to charity."

"That's just it. I don't want people to think I need charity. When they see you like that they'll think I married you for your money."

### Case of the Dumb Parrot

Prof. Zealiope, head of the U. S. Ornithological Survey in Brazil, returned home with a remarkable parakeet which could speak five languages, and could cuss in nine.

Worn-out from his expedition up the Amazon, Prof. Zealiope handed over the bird to his wife, and promptly collapsed on the front-room sofa.

Twenty-one hours later he woke up, just in time for lunch.

"Um-m-m," he smacked his lips. "Tasty, this squab. Where did you get it?"

"That's the remarkable fowl you brought home to me," she smirked.

"Oi, oy, oughh," moaned the professor, holding his head. "You cooked my wondrous parakeet. He could converse in nine languages. You... you..."

"Hmmp. If he was so smart why didn't he speak up when I put him in the broiler?"

No answer was heard.

### They're More 'Hep' Nowadays

One lazy May afternoon an English lit teacher at Wellesley quizzed 20-odd female students orally. Everything went smoothly until—

"What did Shakespeare do during his experimental period?" he thrust at one girl, in his clipped and precise manner.

The amply sweated gal yawned comfortably.

"He married Anne Hathaway," she drawled, "and then avoided her."

*Sic semper Shakespeare.*

### Social Security

Throughout a protracted illness fussy Elmer Pratt kept his spouse running like crazy to satisfy his ever-pyramiding demands. Elmer continued his bedridden tyrannies during a phony convalescence period. Obviously he was enjoying it.

After his sleepless wife had lost 30 pounds, and had begun to shake like a confirmed alcoholic with a "lost week-end" hangover, Elmer decided it was time to arise and return to work.

Back at the office Elmer bragged, "I really timed my 'sick leave' just right. One day more and the 'little woman' would have collapsed with a nervous breakdown. One day less and I'd have missed my last allowable 'sick pay.' Had the time of my life, fellas. The wife waited on me hand and foot—and I got paid for watching her do it."

### Elmer Deserved It

Mrs. Peckhen: "Sorry to disturb you at the office, dear, but the postman just delivered a special delivery letter for you, and I thought you ought to know about it. The letter is marked 'PERSONAL.'"

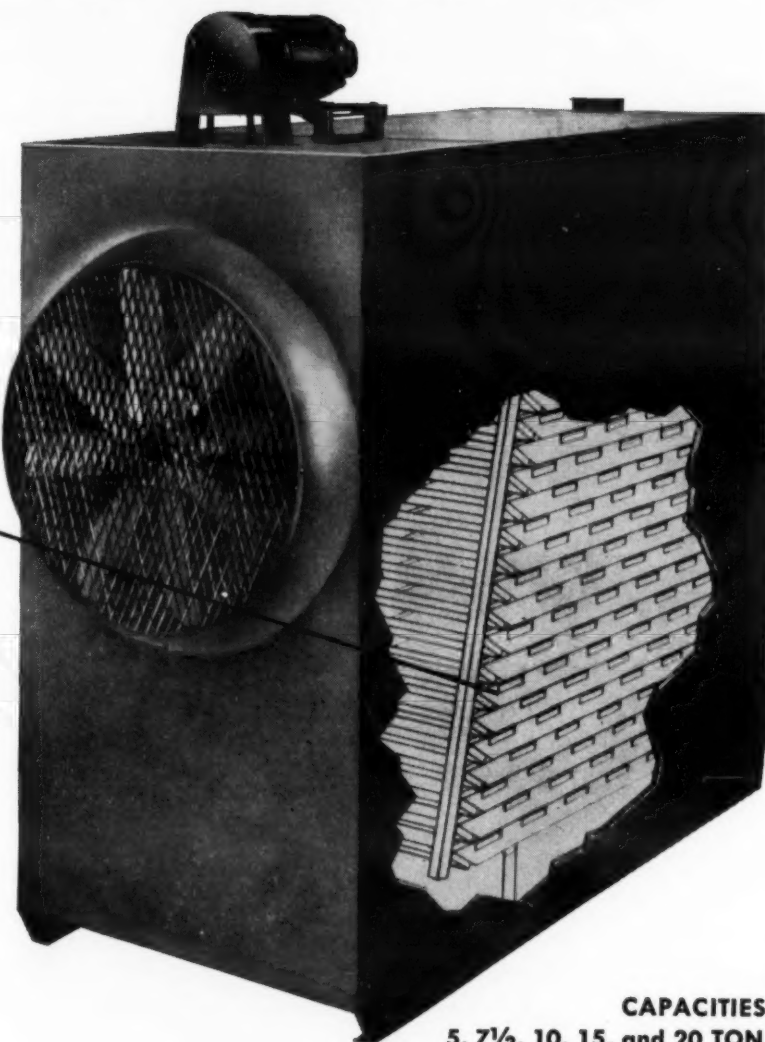
Mr. Peckhen: "So? Who's it from and what does it say?"

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## The Trade-In Problem

### General Suggestions for Determining The Value of Used Refrigerators

With the relaxed Regulation W regulations on instalment credit permitting trade-ins to be accepted as part of or all of the down payment on refrigerators, proper evaluation of used refrigerators will be more important than ever in determining the difference between profit and loss on any sales in which a trade-in is involved.

To assist dealers in arriving at a proper evaluation of used refrigerators, AIR CONDITIONING & REFRIGERATION NEWS is repeating a discussion of used refrigerator values that was prepared for the NEWS by a proprietor of an establishment that specialized in the wholesale and retail buying and selling of used refrigerators.

These articles are an attempt to provide a guide to the "actual" values of various makes and models of used refrigerators, and to explain how these values fluctuate with market conditions.

### Part 3

Following are the most common hermetics in this area together with our appraisal of each and a short discussion of the problems we have encountered with each. I must point out, at this point, that each dealer may have his own setup for handling any specific make which I mention and the problems we have in our area may not be a factor in any other.

#### Coldspot, Semi-Sealed

This classification includes all machines made from 1930 to 1938. In general, the trade-in value line is drawn at 1935. In 1935 the cabinets were streamlined, crisper trays were added in many models, and the general styling commands more value.

Prior to 1935, we place these machines in the \$5.00 to \$10.00 classification and the 1930-1933 models we sell only "as is." Independent rebuilders and service companies have trouble reoperating these units and, even though the rebuilding cost is reasonable, we have built up an antagonistic attitude toward these trade-ins because of the service difficulties involved.

The full hermetic models, 1939, are a good trouble-free machine.

As an over-all trade-in, Coldspots are good because people know them and they can be resold easily.

#### Crosley

All of the sealed unit cabinets have good resale value because of the styling. The only models to be careful with are the following:

GAT series, 1936. GKT series, 1936. HB1 series, 1937.

The above models were sulphur dioxide charged and the cost of rebuilding, by comparison with other models, is high. With the above exceptions, there are many specialists who do excellent work on these units.

Because of the appeal of Crosley in this area, we classify these machines in the \$20.00 to \$30.00 bracket even with defective units.

#### Frigidaire

I do not know of any Frigidaire sealed unit which I can honestly say can be repaired, if the trouble is internal, by anyone other than Frigidaire authorized service. In areas where there is no source for quick exchange of units or where there is no local service, this can be a problem.

The general value of the older Frigidaires is good with the following exceptions:

Standard 43 and 63, 1933.

Standard 4-34, 5-34, and 6-34, 1934.

Standard 3-35, 4-35, 5-35, and 6-35, 1935.

In our experience these units cannot be efficiently repaired and the cabinet resale value does not warrant the expense of a unit replacement. Almost any other Frigidaire model may be repaired or replaced through the regular authorized service and the machines may be sold with an absolute minimum of trouble through the guarantee period.

If the smaller dealer is set up to recondition and sell his trades, or if he has a tie-up with a used refrigeration dealer, then he has a chance to gain back some of the allowance he must give in order to sell. It would pay every dealer to examine his situation closely with regard to this year when, in my estimation, the chips will be down in the major appliance business.

(To Be Continued)

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## Bethlehem Law Aimed at Fly-by-Night Canvassers

BETHLEHEM, Pa.—Intended to keep out "fly-by-night" canvassers, and peddlers who do not have permanent residences here, an ordinance regulating door-to-door selling has been adopted by the Bethlehem City Council.

An amendment to the ordinance requires all "regular year-round salesmen" to secure a license annually.

Fee for this license was fixed at \$2. Also established was a mercantile tax of 1½ mills on the gross volume of business done each year in such sales.

Violation of the ordinance is punishable by a fine of \$100 or 90 days in jail or both.

Mayor Earl E. Schaffer said extreme care will be taken in issuing licenses.

## Oldest G-E Refrigerator Campaign Has 2 Purposes

BAKERSFIELD, Calif.—Offering to trade a brand-new 1951 G-E refrigerator, priced at \$359, for the oldest box of the same make still in operation in central California got a record number of new appliance prospects during July for Oildale Hardware Co. here.

The promotion was developed by R. B. Suds, veteran Bakersfield hardwareman, as a means of overcoming the "doldrums" which have characterized refrigerator sales dur-

ing recent months, as well as to focus public attention on the high durability of his appliance line.

"The Rolls Royce automobile people have achieved a world-wide reputation through pointing out that no Rolls Royce has ever worn out," Suds explained. "Therefore, we are using the same idea to attract visitors to our appliance department."

Used to announce the contest to the public was a quarter-page newspaper ad in the Bakersfield *California*, which asks in a headline "Do you own the oldest G-E refrigerator?" Below, a paragraph pointed out that a new 1951 deluxe 10.8-cu. ft. refrigerator was offered free to the family proving to own the oldest G-E refrigerator in central California.

In addition to the more than 200 potential customers who came in to enter their old refrigerators in on the contest, several hundred more were developed as regular store customers and suggested the names of friends or relatives, known to have an old unit still in use. All of these people will, of course, be followed up via direct mail, advertising, and outside calls, with the offer of efficient, more eye-pleasing new refrigerators.

## Hughes-Peters Distributorship Bought by P. E. Gustafson

COLUMBUS, Ohio—Entire assets of Hughes-Peters, Inc., appliance distributor here and in Dayton and Cincinnati, have been sold to P. E. Gustafson, vice president and general manager, it was announced by William A. Wilson, president.

Operation and policies of the company will continue unchanged.

## 'Hilltop House' Letter Contest Offers Hotpoint Automatic Dishwashers

CHICAGO—As part of an expanded merchandising program designed to support local sales efforts of dealers, plumbing and heating contractors, and builders, Hotpoint Inc. is offering 50 installed automatic electric dishwashers to winners of a nationwide letter contest being conducted by the sponsor of "Hilltop House," CBS radio program.

It is estimated that over two million homes will be reached each week-day by a dishwasher "selling" message in the program's script.

"Point of sale" dealer tie-in is with drug and department stores in each sales area. Plastic-door dishwasher floor displays are available to dealers for use in drugstores with announcement counter cards, entry blanks, and banners furnished by druggists and key accounts.

High contest participation is expected because a recent survey taken by Hotpoint showed that one third of the nation's families intend to buy an automatic dishwasher.

Winners of the contest will be announced over the entire CBS radio network in early September with presentation of dishwashers to be made by local dealers. Installation costs will be paid by the manufacturer.

### JUST ASK US!

Turn to "What's New" Page for useful information on new products.

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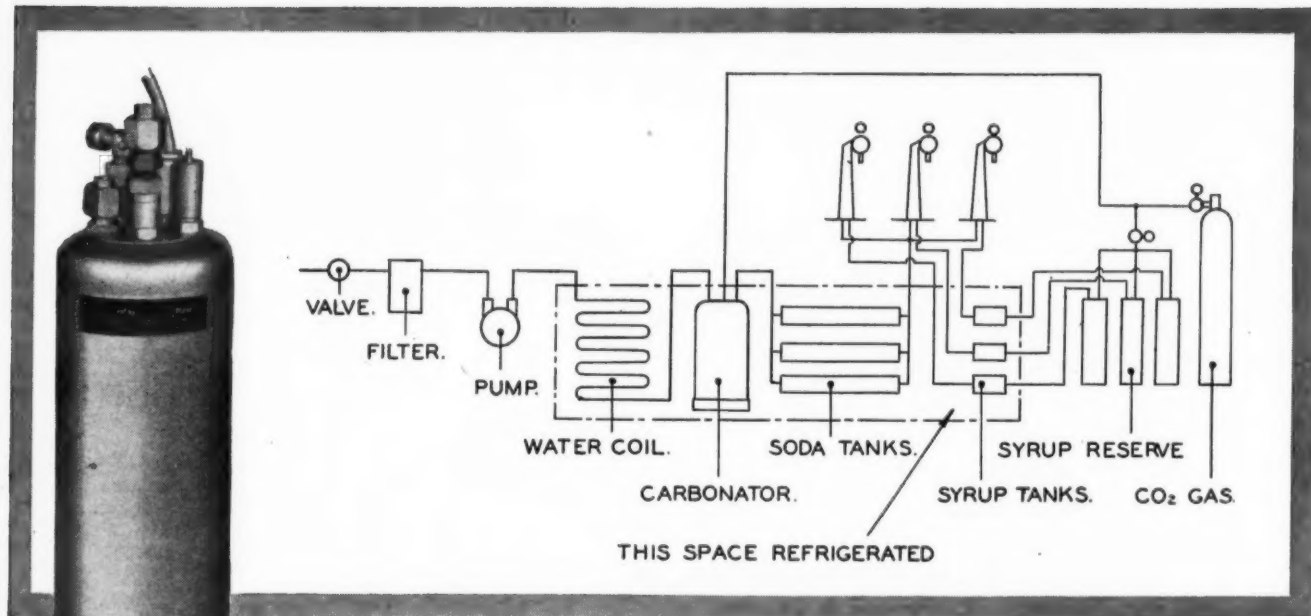


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## Do You Have 'Both Feet On The Ground'?

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TYPICAL SODA FOUNTAIN installation showing the Temprite Carbonator located within the refrigerated compartment, with the pump assembly remotely located.

The most significant feature of a Temprite Carbonator is its *unusual versatility*. For example, the pump may be installed in a remote location (as shown above) to save valuable space within an existing fountain, bar, vending machine, etc., or the carbonator may be obtained as a complete package mounted with pump, motor and relay assembly, for a fast and easy hookup!

Measuring only 5" O.D. x 15" high, the Temprite is a compact easy-to-work-with unit; actually delivers an amazing 6450 glasses of highly carbonated water from a single 20 lb. tank of CO<sub>2</sub> gas. No purging or venting required! No gas wasted!

Temprite Carbonators are ideal for applications where mechanically refrigerated water or soda water coolers, sweet water baths or cracked ice cooling systems are used.

NOW IS THE TIME to investigate the exceptional profit possibilities with Temprite Carbonators.



(Above) The neat Temprite Packaged Carbonator is a completely self-contained unit. The Carbonator, together with pump, motor and relay assembly, is mounted on a sturdy metal base. Water inlet, CO<sub>2</sub> gas inlet, and soda water outlet lines terminate at a rigid connection panel, along with a power supply cord.

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## Excise Tax Laws Need Revision

"NOTHING IS CERTAIN but death and taxes."

None of us today doubts the validity of Ben Franklin's axiom. Yet while medical scientists and better living (made possible in no small degree by refrigeration) have prolonged man's life, political scientists can claim no such improvement in the tax situation.

From the taxpayer's point of view, his position is "deteriorating rapidly," as a military press release would say. Only bright spot in the current trend is that eventually it will eliminate money worries for the individual. After taxes, he won't have any left.

Considerable savings in the cost of government, and thus taxes, could be achieved if efficiency and honesty could somehow be made the rule rather than the exception on the political scene. This is wishful thinking, however, and is probably attainable only through a miracle. Being fresh out of miracles at the moment, our next best bet would be a more equitable distribution of the tax burden.

SPECIFICALLY, why should the refrigeration industry be shouldered with the heavy load of excise taxes when so many other industries are not? This is grossly unfair, yet the most insidious aspect is that the average consumer is not aware he's paying such a tax when he buys a refrigerator or a freezer.

This is the ideal setup for the tax collector. The money rolls in; the public doesn't complain. And he doesn't have to concern himself with a multitude of tax sources because the industry is relatively compact. What could be finer—for the tax collector?

Then, too, refrigerators are essential to modern civilization, and as a necessity they're bound to be purchased in great numbers every year. From the tax collector's point of view this is just dandy because it ensures a reasonably steady source of taxes. By the same token, it's a constant drain on the wise consumers who replace outmoded refrigerators with new models embodying latest engineering advances. Likewise, it's a burden on newlyweds who must scrape to set up housekeeping.

If excise taxes are necessary, must they be confined to such essential products as refrigerators? It has been suggested that instead of socking a 10% excise tax on refrigerators, a much smaller tax may be spread over a broad field to include items in other fields, particularly those that are much less essential. On this basis the tax could be reduced to 1% or less and still yield as much or perhaps more revenue.

THIS WE HEARTILY ENDORSE.

It offers a practical means of spreading the tax burden more evenly across the board than concentrating it on a relatively limited few. Admittedly, it does not solve the problems of inefficiency and wasteful spending in government, although it offers possibilities along this line. If more people were made aware of excise taxes, there conceivably could be more demand for improved government.

Another important change which should be made in the excise tax setup is that the tax should apply only to end products. Considerable confusion exists in applying the tax on items that go into an end product. Precise wording of the law is not always clear, which gives rise to interpretations by government officials and tax experts.

Straightforward excise taxes covering a broad field of end-use products offer a commendable answer to one phase of the complicated tax problem.





COMPACT ARRANGEMENT of a typical Smilen Brothers store, Bronx, N. Y. Ceiling diffusers distribute air evenly from 5-ton unit in rear stock room, and the stock room is cooled directly by another 5-ton unit. Oversizing produces cold storage temperatures at night and comfort cooling by day even with front door open.



TWO 5-TON Typhoon self-contained air conditioners in the stock room of Smilen Brothers fruit store perform double duty. Unit at left cools front selling space; other unit cools stock room and acts as booster for front. Both units together pull temperatures down at night so that fruit can be left on racks.

## Convertible Conditioners

*Slightly Oversized Equipment Cools Customers by Day, Supplies Cold Storage for Fruit Store Chain by Night*

NEW YORK CITY—A novel and profitable secondary use for air conditioning has been adopted by the Smilen Brothers, Inc., chain of fruit stores in New York City. Using packaged Typhoon air conditioning units, Smilen Brothers manages to convert its comfort air conditioning system into cold storage equipment at night, with a considerable saving in time, labor, and spoilage.

Smilen Brothers claims the distinction of being the first company in the country to air condition fruit stores, and in many of them the open-front feature common to this type of store has been preserved.

At first, air conditioning for Smilen Brothers stores was strictly for customer comfort, goodwill, employee morale and efficiency, and other well-known advantages which air conditioning automatically brings.

Recently, however, the role of air conditioning units has been doubled. Instead of picking up all the produce at the end of the day from the racks and placing it in cold storage for the night, the air conditioning equipment is now left running throughout the

night and the merchandise left in place on the racks.

Of course this calls for a greater capacity in equipment, but since doors and windows are closed at night, the temperature can be kept between 58 and 62° F. with only slightly oversized equipment. For example, two 5-ton units will perform the dual job where a 7½-ton unit was needed for comfort cooling alone.

Most Smilen stores are roughly identical, with a 15 x 40 ft. selling area and a 15 x 40 ft. room for stock.

The selling area is air conditioned by one unit, in most cases a 5 ton, and the stock room by another unit of the same size which also acts as a booster for the unit which cools the selling area.

By using two 5-ton air conditioners instead of one 10-ton unit, a certain amount of flexibility is gained. On spring and fall days when the heat is not excessive, one unit alone will often suffice. Furthermore, in case one of the air conditioners should fail to function for any reason, the other

unit will continue to cool the store until repairs are made.

The savings and advantages of this system are many, and Smilen Brothers executives are highly enthusiastic over the results. For one thing, the labor and time involved in moving the produce to and from the storage room and rearranging it on racks has been completely elimi-

nated, according to Smilen Brothers.

For example, it would normally take two hours to set up the racks every morning. The new plan means that selling can continue right up to closing time and that help can be sent home almost immediately afterward.

It also means that selling can begin the moment the store opens in the morning with practically no time required except to replenish depleted shelves.

Furthermore—and this is most important—handling of the fruit is reduced to a minimum. Naturally, fruit must be inspected regularly on the shelves to detect any signs of spoilage.

However, most of the damage

to fruit occurs in such handling as is required under the old storage room system.

Savings in time and labor alone more than compensate for the additional tonnage and the 24-hour operation of the equipment. The net result of all this is that the three most important elements in the Smilen Brothers operation benefit. Employees, customers, and fruit are "all more comfortable" with the "round the clock" cooling system—and sales figures prove that this type of comfort pays off in profits, according to the firm.

In addition to the air conditioning units installed in individual stores, Smilen Brothers has also made use of Typhoon equipment in its general warehouse in Brooklyn.

The entire storage space on the second floor of the present warehouse has been converted into an air conditioned holding room. Three large air conditioning units have been installed to cool the space used for storage.

This protective service of keeping the merchandise as it comes out of the processing departments or from the outside in a cooling space about twenty degrees below outdoor temperature, assures better condition of the merchandise as it arrives at the stores.

Fruit is never kept in the holding room for longer than 24 hours and it usually moves out in a matter of a few hours. However, even such a short period without refrigeration can cause merchandise to break down due to excessive moisture in the crates.

The Typhoon equipment was installed by the Five Towns Refrigeration Co., Inc.

## THESE VALVES STAY CLEAN IN DIRTY WATER!



Model 65 Water Regulating Valve. Pressure 65 to 200 p.s.i. Freon 12. Available in ½", ¾" and 1" sizes.

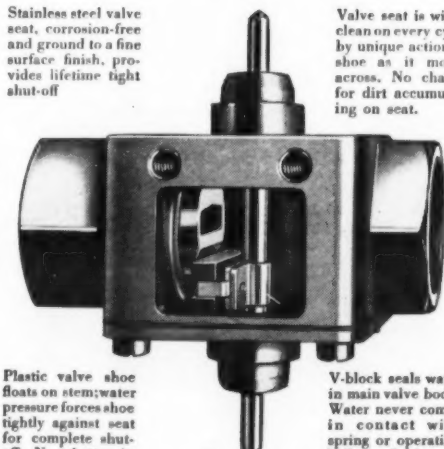


Model 65 Water Regulating Valve. Pressure range 165 to 300 p.s.i. for Freon 22 systems. Model 65 capacity from 2.7 to 42 gal. per min.

### HERE'S WHY

Stainless steel valve seat, corrosion-free and ground to a fine surface finish, provides lifetime tight shut-off.

Valve seat is wiped clean on every cycle by unique action of shoe as it moves across. No chance for dirt accumulating on seat.



Plastic valve shoe floats on stem; water pressure forces shoe tightly against seat for complete shut-off. No chatter in operation.

V-block seals water in main valve body. Water never comes in contact with spring or operating bellows. Leakproof forged-brass body.



**DEPENDABLE Controls**

## DEPENDABLE WATER-REGULATING VALVES PROVIDE SIMPLE, TROUBLE-FREE CONTROL

A quick look inside A-P's water regulating valves tells you why they are the valves you need for trouble-free operation of your cooling system. They're compact — simple to install. Operating range 65 to 200 p.s.i. Freon 12. Regulate cooling water for compressors up to 42 hp. An extra large bellows is your assurance of extra-long life. Because operation is not affected by inlet pressure — valve action is quiet and positive every time — no chattering.

Find out about A-P's trouble-proof water regulating valves today. Remember, it's A-P's — the only valves on the market with "the self-cleaning seat" that stay clean — even in dirty water. Write for Bulletin R-6.

### 3 WAYS BETTER!



**THE FINEST REFRIGERATION OIL**  
...at any price!

✓ HIGH STABILITY  
✓ LOW WAX  
✓ LOW MOISTURE



THE NEW ... IMPROVED ... ANSUL REFRIGERATION OIL ... IS A RESULT OF THE PERSISTENT SEARCH BY ANSUL CHEMISTS AND REFRIGERATION TECHNICIANS FOR THE FINEST QUALITY REFRIGERATION OIL ... AT ANY PRICE!

Since Ansul Refrigeration Oil was introduced in 1949 ... its acceptance by refrigeration men has continued to expand. In only two short years Ansul is one of the leading refrigeration oils sold exclusively through Refrigeration Wholesalers.

The New ... Improved Ansul Refrigeration Oil is now available at leading refrigeration wholesalers everywhere. It meets, or surpasses, every specification established by Ansul Research for a high quality refrigeration oil.

BUY IT NOW AT THE NEW LOW PRICE. Use it for more dependable, trouble-free lubrication.

Ansul has greatly increased its Research facilities — expanded its Research Program — and added new modern pilot plant facilities to better serve the Refrigeration Industry.

### NOTE THESE IMPORTANT ANSUL FEATURES —

- a. \*Lower floc point.
- b. \*50% lower wax content.
- c. Moisture — ANSUL CONTROLLED minimum.
- d. \*Lower pour point.
- e. Rigidly checked for high stability.
- f. \*Lowest affinity for moisture.
- g. New low price.
- h. Available in quart, 1-gallon and 2-gallon cans; also in 5-gallon and 55-gallon steel containers.

\*Improved features

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CHEMICAL COMPANY  
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MARINETTE, WISCONSIN

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Stocked and Sold By Good Refrigeration Wholesalers Everywhere • Recommended and Installed By Leading Refrigeration Service Engineers



# What's New

## Hook-on Meter Can Be Used Without Cutting Line



KEY NO. A-840

SCHENECTADY, N. Y.—A new hook-on power-factor meter, which permits direct measurement of power factor without cutting conductors or interrupting electrical service, has been announced by the General Electric Co.'s meter and instrument divisions.

Newest of the G-E hook-on testing instruments, the type AK-3 power-factor meter may be used on any balanced 3-phase circuit. It gives direct power-factor readings in circuits with voltages ranging from 100 to 600 volts and currents from 15 to 600 amperes.

The new instrument, a companion to the company's AK-1 hook-on volt-ammeter and AK-2 hook-on

wattmeter, is designed for use in industrial plants where maintenance of high power factor is an important economic consideration.

To operate the instrument, the user clips the voltage leads to the potential source, clamps the hook around the conductor, and rotates the selector dial to obtain the proper power-factor reading.

The meter gives readings accurate to within 0.05 power factor, it is said.

## Bonney Thread Restorer Kit Consists of 8 Sizes



KEY NO. A-841

ALLENTOWN, Pa.—Re-chasing battered or damaged threads is claimed to be easy with the latest thread restorer set introduced by Bonney Forge & Tool Works here.

Designated as TR7, the set consists of eight sizes of restorers, ranging from a bolt diameter of 1/4 in. with 28 threads per inch to a 3/4-in. bolt diameter with 16 threads per inch.



## Hussmann Ice Cream Case Has Been Newly Designed

KEY NO. A-842

ST. LOUIS—A newly designed low temperature display case for merchandising ice cream has been introduced by Hussmann Refrigeration, Inc. here.

Called model OLT-7CV-I, the case will hold about 600 pint packages of ice cream.

It is equipped with a Hussmann built, self-contained, semi-hermetic condensing unit with "F-22" refrigerant. Automatic defrost is obtained without drain, the company said. A dual cooling system of plates in the product area and an overhead coil keep the merchandise in open display in ideal condition, it added.

The new model is now in production and available for immediate delivery, the company said.

## Hotable Regent Model Looks Like Teawagon



KEY NO. A-843

NEW YORK CITY—The Hotable Regent, a mobile table that looks like a teawagon yet incorporates an electrically heated radiant glass top for keeping foods hot, has been introduced by the Salton Mfg. Co., Inc. here.

The upper tray of the Hotable Regent measures 16 by 24 in. and is made of special Ra-Crid shatterproof glass. An aluminum heater element is fused into the glass by a newly developed method.

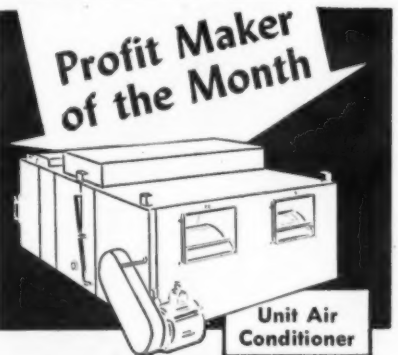
When the electric cord of the table is plugged into an a.c. outlet, the tray reaches a temperature of about 200° F. within two or three minutes. A thermostatic control automatically maintains this heat.

The radiant glass tray, which can be easily cleaned, is enclosed in a bronzed frame, with amberized plastic handles on each side for easy handling.

The lower tray of crystal "Securit" shatterproof glass is convenient for desserts, salads, or for stacking dirty dishes, the company said.

Hardwood legs for the table are done in natural or dark finish and are mounted on large casters.

Retail price of the Hotable Regent is \$59.75.



Profit Maker of the Month

Unit Air Conditioner

Ceiling or floor models easily installed in new or old buildings. Cools, heats, filters, ventilates and provides humidity control. Nine sizes. Widely used in stores, shops, restaurants, offices, laboratories, industrial plants. Send for Bulletin 76.

**usAIRco** UNITED STATES AIR CONDITIONING CORP.  
Everything in Air Conditioning  
3301 Como Ave. S. E.  
Minneapolis 14, Minn.

## Stud Driver Can Penetrate Concrete, Steel, or Wood



KEY NO. A-844

BRIDGEPORT, Conn.—A cartridge-powered stud driver that is capable of driving five studs per minute into concrete, steel, wood, brick, asbestos, and other structural materials has been designed and developed by the Remington Arms Co., Inc. here.

According to Remington, a blank cartridge containing slightly more than three grams in weight can generate enough controlled energy to drive a steel stud into a structural steel plate 1/4 in. thick, or so snugly imbed it into aged concrete that a pull or more than 4,000 lbs. is necessary to remove it.

Weighing little more than 5 lbs., the Remington model 450 stud driver can be operated by one man and is easily portable. Remington engineers claim that this tool can represent a saving in labor costs of as high as 75% over other methods.

Energy supplier in the model 450 is a 32 caliber Long rim fire blank cartridge. A colored plastic heel cap or cup is inserted in the mouth of the cartridge case. The color indicates the powder load, the manufacturer states.

The studs used vary in length from 1/2 to 2 1/2 in. and are made of specially developed steel alloy that is almost file hard and resists shattering when driven. These studs may be standard head, break-off head, externally threaded, or internally threaded.

The stud driver is said to have a soft recoil and a noise about like a pop gun. A firing pin indicator reveals instantly whether or not the gun is cocked.

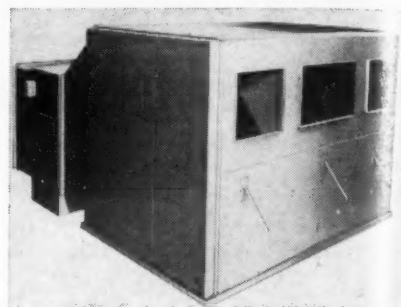
To operate, the operator slips the end of the stud into the plastic heel cap, opens the tool, places the loaded cartridge in the chamber and

closes the tool, which is now ready for firing.

A Neoprene-lined steel guard is attached to the muzzle of the tool. Without this guard the tool cannot be fired.

The operator presses this guard firmly against the work surface, depresses the safety button, and holds it in that position with one hand. Then he fires the tool by pressing the trigger with the other hand. Failure to follow any of these steps will prevent the tool from firing.

The model 450 stud driver with steel carrying case and removable tray for cartridges and studs is priced at \$119.50. Cartridges for the gun list at \$5 per hundred. Studs vary in price from \$14 to \$18.50 per hundred.



## Trane Air Conditioner Can Handle Up to 6 Zones

KEY NO. A-845

LA CROSSE, Wis.—A line of single air conditioning units to meet year-round comfort needs of up to six different zones in a building has been expanded by The Trane Co., here.

This unit, the Trane multiple-zone climate changer, uses but one heating coil and one cooling coil to provide full air conditioning comfort for as many as six areas. Each zone has its own control, and receives the conditions it needs without affecting any other zone.

The multiple-zone climate changer, according to the company, can eliminate inaccurate air conditioning during the in-between seasons, because the unit permits gradual change-over from heating to cooling and back again for each zone.

Six sizes of the unit provide capacities as high as 23,400 c.f.m.



## International acceptance!



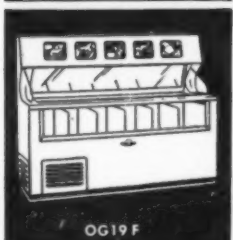
SG15



SG26



OG11F



OG19F

## Thousands of ACE low temp cabinets in use throughout the world

WORLD-WIDE acceptance of ACE equipment was not accomplished overnight. This took years. We built our cabinets with the full confidence that they would do the selling job for you. The name "ACE", is a respected brand, internationally recognized as THE cabinet that represents all 6 vital factors that make for a perfect unit . . . 1—design, 2—styling, 3—engineering, 4—construction, 5—performance, 6—price.

Literature of the complete ACE line is available on request.

## Ace Cabinet Corp.

New Bedford, Mass.

Please address all inquiries to: Exec. Sales Office: 1457 Broadway • New York 18, N. Y.  
Export Dept.: 39 Broadway, New York 6, N. Y.

Manufacturers of Frozen Food Display Cabinets, Ice Cream Dispensing Cabinets, Farm Freezers and Bobtails.

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## SLANTS on Service

"Slants on Service" is a new "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business. These helpful hints and suggestions for improved service methods and shortcuts have been assembled in capsule form.

### Cloth Wick Will Prevent

#### Floating Valve from Sticking

Float valves such as used in evaporative coolers may be mounted above the water level. While the water is flowing the valve is wet, but between times it's dry. Every time the valve dries, a small deposit of lime remains, and eventually the lime deposit builds up to prevent the valve operating.

Solution is to wrap a cloth around the valve and let the ends hang into the water. Wick action of the cloth will keep the valve wet, preventing evaporation and resultant lime deposit, according to Dan Morey, manufacturer of such valves, who passed the information along to Refrigeration Service, Inc., Los Angeles parts wholesaler.

### Use Care In Opening Valve

#### After Installing New Drier

After installing a new drier in the liquid line, don't spin open the outlet valve on the receiver with a ratchet wrench. Doing this, warns Refrigeration Service, Inc., Los Angeles parts wholesaler, will release a sudden rush of flash gas and slugs of liquid that "will hit the drier like a bullet."

"The force of impact of the liquid slug will sometimes damage drier screens and filters, and may cause abrasion of the drier crystals. At the very least, it will cause severe packing of the crystals, thus increasing pressure drop across the drier."

"To avoid these troubles, crack the receiver valve slightly until the pressure is equalized, then open it up full. A little time spent on this operation will result in more efficient and better functioning driers."

### Multiple Compressor Jobs

#### Require Proper Equalizers

When two reciprocating compressors are connected in parallel, equalizing lines should be installed for best results. This is especially important with respect to crankcase pressures, which should be kept equal to insure sufficient oil in each machine.

Some machines have a single equalizer tapping in the compressor body, but others have two such tapings. Use two equalizing lines if the machine has two tapings. One line will not be enough in this case.

## Pan American Installs 2 20-Ton Cooling Systems

ELMHURST, N. Y.—Installation of two 20-ton air conditioning systems in only three weeks' time assured a comfortably cool summer for more than 500 Pan American World Airways office employees at New York International Airport, it was reported by Abe Gollon, of Rimco Refrigeration Corp. here, who designed and installed the systems.

Two self-contained UsAirco RK-20 units are being used to cool the airline's communications, dispatch, and general offices which occupy the upper floors of two windowless structures between hangars at the Port of New York Authority's air terminal.

The new equipment, which replaces ventilating systems, has been located in enclosed penthouses, one on the roof above the general offices and the other in an engine room at office level. Ductwork for the system has been installed by A. Suna & Co.

## 150-Ton System Cools Mobile Seamen's Club

MOBILE, Ala.—One of the largest air conditioning contracts of recent years was recently completed here with the installation of a 150-ton air conditioning system in the new Seamen's Club.

The system was designed and installed by Air Conditioning Engineers, Inc., headed by J. M. Hastie, and provides 78° temperature throughout the 3-story building, jointly financed by a group of steamship line organizations, fruit forwarders, exporters, etc., with port terminals at Mobile.

Operating as a recreation center and transient hotel for the thousands of merchant seamen who regularly put into port at the Alabama harbor, the club is the largest such building ever to be built, according to Hastie.

The 150-ton Carrier system, as installed, takes care of a series of zones, including public rooms, restaurants, dormitories, private rooms, offices, and a ballroom. Up to 500 merchant seamen can be readily accommodated, and the building, financed entirely by private funds, has considerably advanced goodwill for the cooperating steamship companies.

## Wholesalers' Sales Decline During June over Year Ago

### Appliance Wholesalers'

#### Inventories Show 63% Increase Over Same Period of 1950

WASHINGTON, D. C.—June sales of appliance and specialty wholesalers declined 17% compared with a year ago and 10% compared with May, according to the Bureau of the Census.

Sales of refrigeration equipment and parts wholesalers were down from June, 1950, too (15%), but climbed 2% over May. For the first six months of the year, sales of both trades were ahead of the like 1950 period, appliance wholesalers' volume being up 16% and that of refrigeration equipment wholesalers rising 18%.

June sales of all wholesalers reporting to the Census Bureau dropped 3% below the previous month but were 4% higher than during a year ago.

Sales for the first 1951 half advanced 22% compared with the corresponding sales period of last year.

Appliance wholesaler inventories at the end of June increased 63% over the year-ago level but decreased 3% compared with May. Inventories of refrigeration equipment wholesalers were up 27% over a year ago and were unchanged from figures given for May.

For all wholesalers, inventories on June 30 were up 1% above May and 39% above June, 1950, the report indicated.

### Sales

Kind of Business and Geographic Division	Per Cent Change		June 1951 Panel	
	June 1951 from June 1950	June 1951 from May 1951	No. of Firms Reporting	Reported Dollar Value (add 000)
Appliances and specialties wholesalers	-17	-10	116	17,980
New England	-41	-18	7	644
Middle Atlantic	-10	-10	28	7,081
East North Central	-6	-8	19	2,150
West North Central	-28	0	16	1,279
South Atlantic	-14	+2	15	2,308
South Central	-31	-13	10	1,223
Mountain	-12	-23	6	716
Pacific	-24	-14	15	2,579
Refrigeration equipment, parts (com'l)	-15	+2	68	2,271
Middle Atlantic	-32	-4	16	809
East North Central	-25	+5	16	224
South Atlantic	+2	+10	18	608
Pacific	+1	-9	8	176

### Inventory, End-of-Month (At Cost)

Kind of Business and Geographic Division	Per Cent Change		June 1951 Panel	
	June 1951 from June 1950	June 1951 from May 1951	No. of Firms Reporting	Reported Dollar Value (add 000)
Appliances and specialties wholesalers	+63	-3	89	34,120
New England	+66	0	5	1,285
Middle Atlantic	+74	-4	14	9,364
East North Central	+61	-4	15	4,573
West North Central	+64	-4	14	5,160
South Atlantic	+61	+1	15	4,680
South Central	+65	-5	8	2,571
Mountain	+17	0	6	1,593
Pacific	+64	-4	12	4,894
Refrigeration equipment, parts (com'l)	+27	0	62	4,785
Middle Atlantic	+36	0	13	1,606
East North Central	+5	-1	16	770
South Atlantic	+25	+1	17	995
Pacific	+50	+2	8	669

for all water cooling use *Filtrine*  
—sell more condensing units

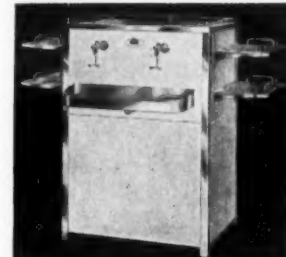
## "DO Rating" Orders are Vital . . .

Filtrine products meet government specifications

All Federal Agencies . . . Air Force . . . Army . . . Navy . . . Marine Corps . . .  
know that Filtrine products meet government specifications.

### COOLERS FOR MESS HALLS — CAFETERIAS

**Sell your own condensing unit . . .** with coolers backed by Filtrine's 40-year dependability. 1. General acceptance for high efficiency—dependability—20-year life construction. 2. High capacity—super storage. 3. Handsome exterior (all stainless steel or Duco with stainless trim). 4. Equipped to suit with top and/or side shelves. 5. Bubblers, glass-fillers, front, back or all sides. 6. Can be "Taste-Master" equipped to banish chlorine and insure sparkling water.



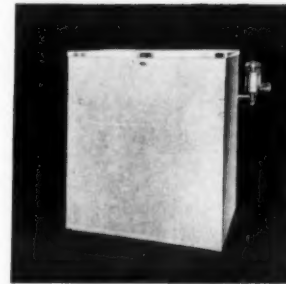
MC-14-S MC-25-S  
MC-43-S MC-40-S



No. 4  
"Taste-Master"  
Filter

### COOLERS FOR X-RAY & PHOTOGRAPHY

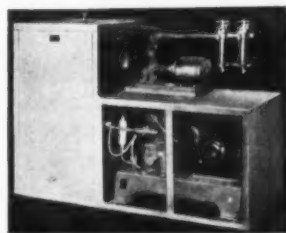
**Sell your own condensing unit . . .** with these Filtrine coolers as repeatedly named for military and V.A. X-ray installations; Signal Corps and Air Force dark rooms and photo labs. 1. Dependable water of correct temperature for film processing. 2. Large storage for heavy duty and emergency requirements. 3. High efficiency, economy operation—20-year life construction. 4. Floor mounted with stainless steel work-table top; also under-counter models. 5. Filters (extra) prevent scratched and pinholed negatives.



PH-7 PH-14 PH-25

### REMOTE COOLERS FOR ALL USES

**Sell your own condensing unit . . .** with Filtrine coolers suitable for new and replacement installation everywhere: barracks, military depots, mills, schools, post offices. 1. Capacities 5-800 g.p.h.—storage 7-300 gallons. 2. High efficiency—20-year life-span. 3. Insulation—2" hydrolene-sealed corkboard. 4. Filters and Rectifiers/Dechlorinators available for all sizes.



Typical "Packaged"  
Circulating Chilled Water System

### PACKAGED CIRCULATING CHILLED WATER SYSTEMS

**Sell your own condensing unit . . .** with complete Filtrine systems for circulating drinking water in offices, hospitals, industrial plants . . . for processing water as low as 34°. 1. Completely packaged for streamlined engineering, quick installation. 2. Capacities 5 to 400 g.p.h.—Storage 5 to 150 gallons. 3. Equipped with heavy-duty pump. 4. Your condensing unit factory installed. 5. Insulation—2-inch hydrolene-sealed corkboard. 6. 20-year life construction. 7. Filter-Rectifier assembly (extra) to kill chlorine and keep water sparkling.



Get our new "How to Sell DO Jobs" Write Dept. RF-1

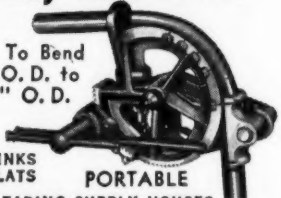
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for all tubing or pipe

### Handy Tube Bender

Sizes To Bend  
3/4" O.D. to  
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The Name:

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The Products:

REFRIGERATION and  
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Fast, world-wide, low-cost de-  
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## Refrigeration Units WANTED

Desire to purchase 1/8 to 1-HP Sealed or Open type; standard brands; Complete condensing units; Also motors, controls, valves, etc. Give full details.

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All Standard condenser coils have closely spaced fins which greatly increase the capacity. Sizes range from 1/4 to 5 h.p. A S M E approval is available on special order.

Standard also manufactures a complete line of receivers.

Write for Bulletin SC-4

STANDARD REFRIGERATION CO.  
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## DRIFREEZ

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Outperforms All Dehydrators by Test

Never Stores Water

Removes to 1 1/2 oz. Physically Neutralizes All Acidity

Prevents Corrosion and Plating Perfectly Filtered

Units Never Require Baking By Vacuum

SAVES ENDLESS SERVICE CALLS

Tested for Safety by Engineering Laboratory

SEND FOR BROCHURE

**BERNA CORP.**  
RICHMOND HILL 18, N. Y.



*a good tip for wise refrigeration men:*

**Always use dependable quality built  
MUELLER BRASS CO.  
parts.**



**8 good reasons why it pays to stock, specify and install Mueller Brass Co. STREAMLINE Globe Type Valves.**

- No bolts—no flanges—no gaskets.
- New design eliminates excessive weight.
- Can be disassembled and ready to solder into the line in 10 seconds.
- Stem of corrosion resistant aluminum bronze.
- Highly polished red bronze body.
- Sizes 3/8" to 4 1/2" O.D. Order from your refrigeration wholesaler.

- Positive shut-off always assured with the amazing nylon stem seating disc.
- "O" ring provides a permanent, positive seal against any loss of refrigerant.

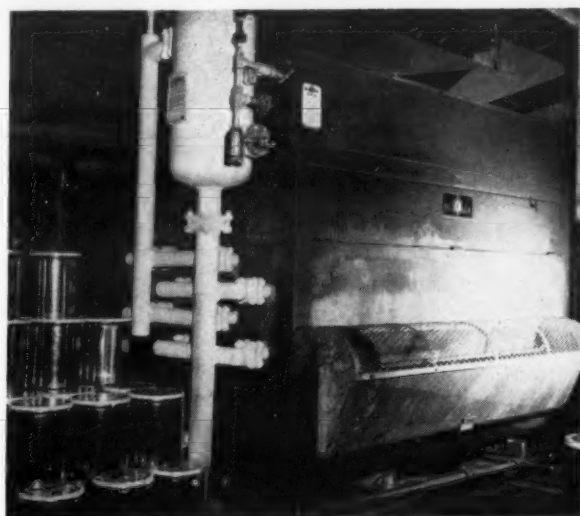


**MUELLER BRASS CO. PORT HURON 10, MICHIGAN**

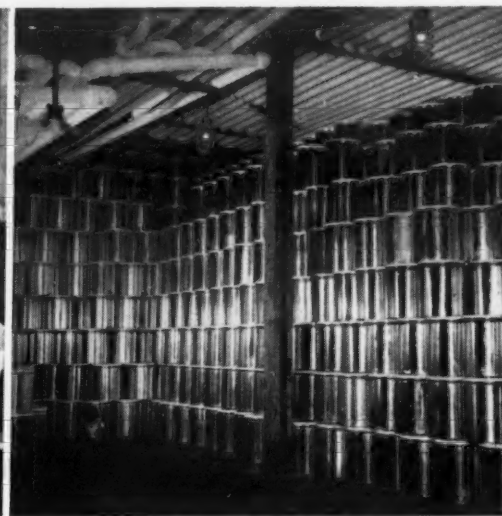
Have these STREAMLINE products on hand for every job where you want dependable performance.

Write for catalog R-151 describing complete line of STREAMLINE refrigeration products.

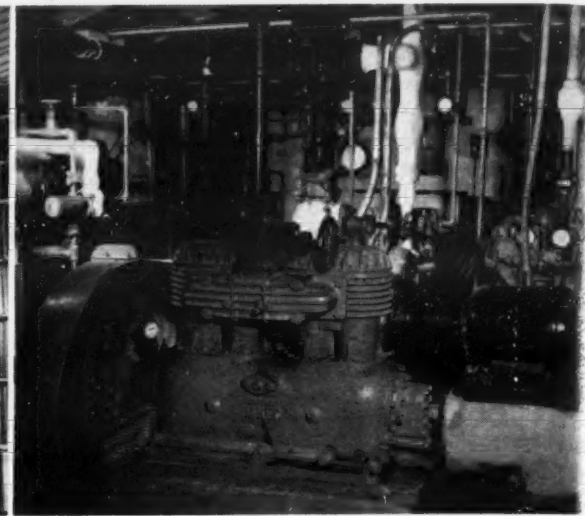
STREAMLINE refrigeration products are individual and multiple packaged for complete protection.



RAPID FREEZING of cherries is accomplished by huge brine-spray cooler operating at close to -40°.



STORAGE in room held at 0° by ammonia pipe coils follows freezing.



BOOSTER COMPRESSOR in foreground is one of seven Baker machines employed in Stephenson orchards.

### For Perfection

## World's Largest Cherry Orchard Operates Own Freezing Plant

LEXINGTON, Mich.—At what is probably the largest cherry orchard in the world, the owners also operate their own freezing plant. Thus cherries can remain on the tree until fully ripened and yet be frozen at the peak of quality within a brief few hours after picking.

Most growers of cherries depend on packing plants for freezing or canning the fruit, but not the Stephenson Land Co., whose orchard occupies 280 acres and numbers some 20,000 trees. A large building located in almost the center of the orchard houses processing equipment, a freezer, 0° storage space, and a machinery room containing four Baker ammonia compressors with a total of 70 connected horsepower.

The firm has had its own freezing plant for some years, but this season decided to increase its capacity. So William Stephenson, who manages the orchard and freezing plant, called in J. T. Coan of Motor City Refrigeration Engineers, distributor of Baker machines in Detroit.

As a representative of another distributor, Coan had sold and engineered the original installation. To

increase freezing capacity he recommended the addition of a Baker 14BA booster compressor and the installation of a Niagara model 660 spray unit in the freezer itself. The revamped job was ready for operation about a week before the cherries started coming in from the orchard.

Freezer room is L-shaped with major dimensions of 20 by 22 ft. and will freeze 3,000 lbs. of cherries per hour. The spray unit operates at close to -40° F. and maintains an air temperature within the freezer below -20° F.

All the cherries frozen at the Stephenson orchard are commercially packed in 30-lb. cans. As the cherries ripen in mid-summer, the processing and freezing operations are on virtually a 24-hour-a-day basis.

Tractors make the rounds of the orchards, hauling the cherries picked by a large crew into the plant. Baskets of cherries are dumped into a conveyor which carries them up to one of four large water tanks. After thorough washing to remove dirt and residue of sprays with which the fruit has been treated to protect it from disease, insects, and birds, the cherries drop on to a conveyor belt.

Conveyor belt is flanked by numerous inspectors who remove the cherries that won't pass inspection. From there the cherries go through two machines which automatically remove the pits.

(The pits, incidentally, are saved and later spread on the ground in the orchard. They work into the soil and keep it from packing and caking.)

Another inspection follows the automatic pitting operation, after which the cherries flow into cans on scales, sugar is added, covers forced on, and the can placed on a hand truck. The hand truck is loaded about every half hour and is then moved into the freezer, where the cans stay 4 to 5 hours.

The freezer opens off the 0° storage room, and after the freezing cycle the cans of cherries are moved to the storage room, which will hold about 9,000 cans.

"An average year's pack runs between 25,000 and 30,000 cans," explains William Stephenson, the manager.

This means that only about a third of this can be stored at the orchard, so the rest goes into a cold storage warehouse in Detroit, some 90 miles south. The Stephenson firm, however, is considering the enlargement of its storage facilities.

INSTALLER J. T. Coan (right) jokes with B. F. Stephenson, Jr., and William Stephenson (center), who operates the orchard and freezing plant.



To achieve the low temperature required for quick-freezing on this scale, Coan of Motor City Refrigeration designed a two-stage system. Refrigerant circuiting is as follows:

Suction line from the spray unit in the freezer goes to the 14BA Baker "booster" compressor which is driven by a 25-hp. motor. This operates to as low as a 16-in. vacuum. From the booster the refrigerant flow is to a water intercooler then to a liquid-gas cooler, and thence to two F6B Baker compressors, each operated by 15-hp. motor. From here gas is discharged in a large Recold evaporative condenser located just outside the machinery room and thence back to the spray unit in the freezer room.

Another F6B compressor connected to ceiling pipe coils holds the storage room at 0° F.

The freezer room itself will also serve as storage space after the final freezing operation is completed, and the Stephenson firm figures that 0° holding temperature can be maintained here merely by leaving the door open to the storage room.

All of the compressors on the job are cross-connected, points out Coan.

"This will permit any combination of compressors to be operated. For example, one of the second stage

machines on the freezer room could handle the 0° storage room merely by resetting the valves. This provides a lot of flexibility and gives us standby protection in the event one machine should fail," he explains.

Well water is used throughout the plant for all processing and for the evaporative condenser serving the four compressors. No difficulty has been experienced with water conditions on this job, Coan indicates.

Water to the evaporative condenser is usually shut off in the fall when only one compressor is operating for the storage room. The fan continues to run on the "evap" but during cold days of winter the fan too is stopped.

Besides the equipment for cherry freezing and storage, Coan has also installed equipment in the same building for an apple storage. Two 3-hp. air-cooled Baker "Freon-12" machines are combined with two Baker-Recold dual fan ceiling-mounted blower units to cool a 40 by 40-ft. apple storage room.

This installation was made last year, and the Stephenson company not only used it for holding apples over a period of several months until the market is more favorable but also holds peaches there for two or three weeks.



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## Current Literature Available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

### Carbon Brushes Discussed In General Electric Booklet

—KEY NO. M-840—

SCHENECTADY, N. Y.—A new two-color, 28-page booklet entitled "Carbon Brushes for Electric Equipment" has been announced as available from the General Electric Co. here.

Designated as publication GEA-5597, the bulletin describes and illustrates the fundamental considerations given to the design, application, and manufacture of carbon brushes and includes a section on brush terminology.

Produced to familiarize users with the physical characteristics that must be known before proper recommendation can be made for a brush application, the booklet also tells of the engineering services offered by G-E to help solve specific brush problems.

Included are sections on types of brushes, characteristics of brush grades, brush grade recommendations, mechanical design of brushes, and tips on brush replacement.

### Rockwell Bulletin Covers Service Regulators for Gas

—KEY NO. M-841—

PITTSBURGH—A new bulletin No. 1026 covering the Rockwell 107 and 173 service regulators for natural or manufactured gas installations has recently been published by the Rockwell Mfg. Co. here.

The No. 107 regulator utilizes the ejector principle of automatic boosting which starts operating at a low flow rate and increases as the load increases.

The No. 173 will reduce 100 p.s.i. or less inlet pressure to uniform outlet pressure of as low as 3-in. water column and have a capacity range of from 300 c.f.h. of .6 specific gravity gas at 8 in. w.c. to 1,250 c.f.h. at 50 p.s.i. inlet pressure.

Covered in the 16-page bulletin are design and performance features, parts illustration and list, servicing information, capacity tables, and dimensions.

### Laws Governing Retailers Explained In New Book

—KEY NO. M-842—

NEW YORK CITY—The laws that govern the business activities of retail establishments are analyzed and explained for the benefit of buyers and merchants in a new book, "What Every Retailer Should Know About The Law," by J. Norman Lewis and R. Duffy Lewis, just published by Fairchild Publications, Inc.

Pooling their knowledge and experience, J. Norman Lewis, attorney, and R. Duffy Lewis, department store general merchandise manager, have written a text in clear, non-

legal language completely understandable to the average retailer who may not be thoroughly acquainted with his rights and obligations under the present law.

The book has been divided into four separate categories. The first section examines the laws that determine the retailer's liability to his customers. His obligations and dealings with his employees are reviewed in the second part, while the third section discusses the laws that determine his rights and liabilities in his dealings with merchandise sources.

Finally, the authors analyze government laws and regulations as they pertain to retail business.

Actual court cases have been cited to acquaint the reader with the leading decisions that the courts have made in situations which may be faced by retailers.

The book is cloth bound, contains 72 pages, and is priced at \$2.50 per copy.

### Cold Storage Door Data Given In Jamison Booklet

—KEY NO. M-843—

HAGERSTOWN, Md.—A new 12-page data and specification booklet has been prepared by Jamison Cold Storage Door Co. to guide architects, contractors, and builders in their selection of the proper type of cold storage door for various temperature conditions.

The booklet illustrates basic types of doors for various temperature ranges—reach-in, walk-in, track, and vestibule—and gives suggested specifications and outline dimensions. It includes a check list of items to remember when selecting and specifying a cold storage door.

### Manual Covers Installation Of Monotube Cooking Units

—KEY NO. M-844—

CHICAGO—How to install and order Monotube electric surface cooking units and water heater units is the subject of a manual recently issued by Tuttle & Kift, Inc. here.

The 20-page manual gives complete information on the company's monotube surface cooking unit line which has recently been revised so that by stocking four basic units and nine drip pans, the dealer can replace units on any range.

Eight pages of tables and listings are included. So are installation instructions and data on sales aids.

### Barber-Colman Gives Tips on Valve Piping

—KEY NO. M-845—

ROCKFORD, Ill.—A sheet of tips on valve piping is available upon request from the Barber-Colman Co. here. This sheet, F-4774, illustrates installation hints for fitters and plumbers.

### Acme Industries Publishes Bulletin on Liquid Chillers

—KEY NO. M-846—

JACKSON, Mich.—Acme Industries Inc. has published bulletin No. 640 on UX and UXR liquid chillers.

This brochure covers liquid chilling units with fixed and removable type tube bundles. The units are used for chilling liquids such as water, oil and alcohols.

The bulletin furnishes helpful information on specifications, selection procedure, and heat transfer, and contains outline drawings and a schedule of dimensions. A table giving factors for determining the mean effective temperature difference is also included.

### Perimeter Insulation Story Told by Fiberglas Corp.

—KEY NO. M-847—

TOLEDO—A 20-page booklet relating "The Story of Perimeter Insulation for Standard Heating Systems" has been published by Owens-Corning Fiberglas Corp. here.

The booklet contains many diagrammatic sketches illustrating the proper method of installing perimeter insulation.

The booklet relates that in basementless houses using concrete slab floors on grade, temperatures inside and outside the home and those below the house must be considered and that much heat is lost through the concrete floor slab and the stone and gravel fill if perimeter insulation is not installed below ground along the foundation wall.

By use of perimeter insulation

most of the heat is kept in the floor slab where it creates comfort. The booklet points out that concrete in slab and masonry in foundation walls conducts heat 30 to 35 times faster than insulating materials.

The publication gives step-by-step instructions with sketches for installation of perimeter insulation and points out the benefits to the homeowner, builder, and heating manufacturer.

In addition it describes the three types of Fiberglas perimeter insulation available.

### Marlo Releases Data on Room Air Conditioners

—KEY NO. M-848—

ST. LOUIS—A new bulletin, listing complete performance data and specifications on the Marlo line of remote room air conditioners, has just been released by the Marlo Coil Co. here.

Designed for cooling, heating, ventilating, and filtering in such multi-room installations as those in hotels, apartments, office buildings, hospitals, and other institutions, the Marlo model FWC remote room air conditioning units are intended for installation in existing buildings where space or cost of duct systems is prohibitive; or in new buildings where the number of units required may be more economically installed in preference to a central air conditioning system.

All air drawn from the room and/or the outside is filtered. The units are equipped with filters, fans, coils, motor, and drain pan. The cabinet is constructed of heavy furniture steel, modern in design, and finished in

attractive baked enamel colors that harmonize with any interior decorating scheme.

The Marlo remote room air conditioning units are available with hot or chilled water coils, direct expansion refrigeration coils, steam coils, and various combinations of these coils. Copies of the new bulletin are available upon request.

### Information Published on Niagara Concentrators

—KEY NO. M-849—

BUFFALO—Two new information sheets on Niagara "no-frost" concentrators have been published recently by the Niagara Blower Co. here.

Bulletin 118 illustrates and describes the series 6600 concentrators with capacities ranging from 15 to 36 g.p.h. and bulletin 119 tells about the Series A concentrators which have capacities ranging from ½ to 6 g.p.h.

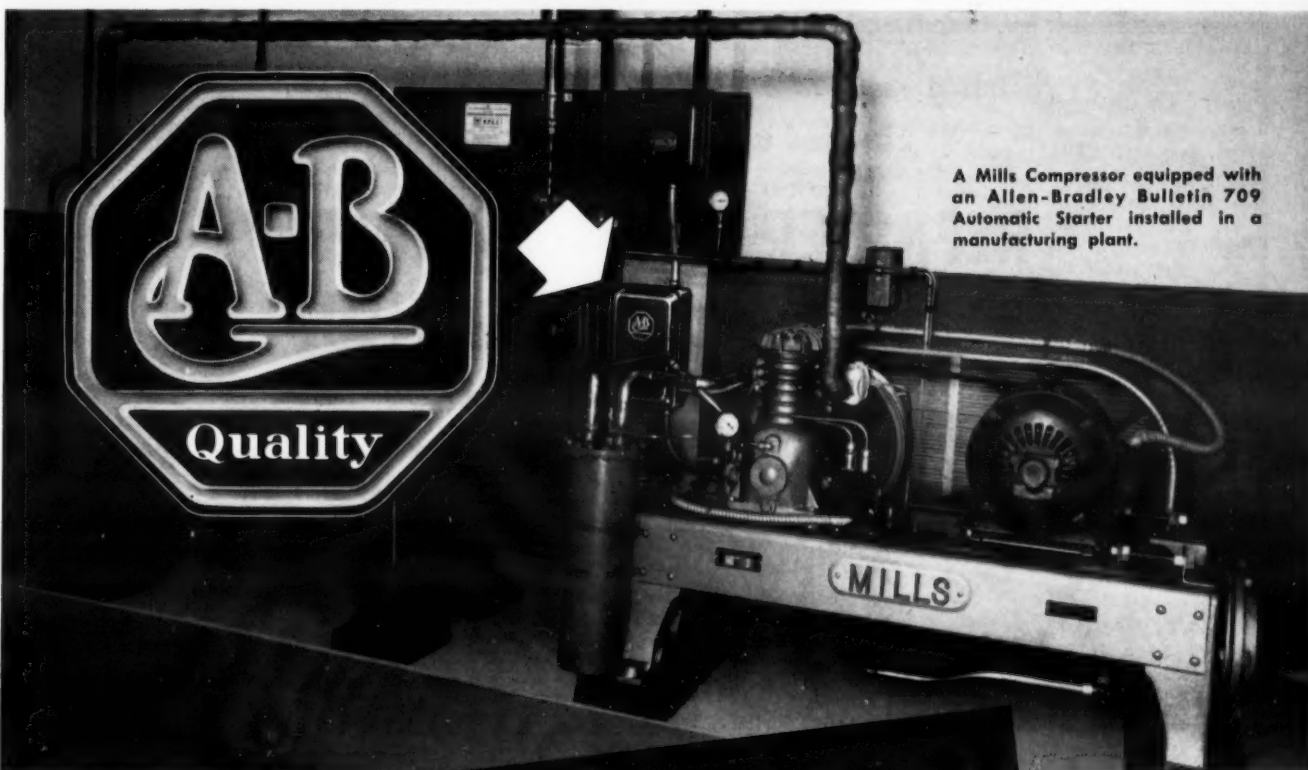
### Arnett of Canada Describes Fountain Equipment Line

—KEY NO. M-8410—

WINNIPEG, Man., Can.—A four-page folder describing its line of soda fountain and luncheonette equipment has been published by the Arnett Co., Ltd. here.

Pictures and specifications of the various items of equipment are given, along with a listing of outstanding features.

The Arnett line includes fountains, bob-tails, carbonators, sandwich units, water service stations, milk dispenser, steam tables, and utility sections.



A Mills Compressor equipped with an Allen-Bradley Bulletin 709 Automatic Starter installed in a manufacturing plant.

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# Government Contracts

## PROCUREMENT INFORMATION

The following is a list of proposed procurements issued by the various indicated U. S. Government procurement offices. This list is compiled and made available daily on a free pick-up basis. Prospective bidders may obtain complete bid sets by a request to the purchasing office under which the purchase is listed in this Synopsis. Be sure to identify completely the bid invitation you wish by including in your request the item description, the invitation number or reference number and the opening date. This will save time in filling your request. For reasons of economy, specifications are normally not included with the bid invitations unless the specification is a new one. First time bidders on a particular item should request a copy of applicable specifications and drawings.

### DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for additional data on a bid invitation issued by any of the following U. S. Army Ordnance Offices: Ordnance Tank Automotive Center; Detroit Arsenal; Frankford Arsenal; Picatinny Arsenal; Raritan Arsenal; Rock Island Arsenal; Springfield Armory; Watertown Arsenal; and Watervliet Arsenal. Complete information on any purchase listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is on file in your nearest Department of Commerce Field Office. Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named offices.

Invitations for Bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q" or, if numbered, the number will be followed by the letter "Q."

Description	Quantity	Invitation No.	Opening Date
QMSS Purchasing O-Utah General Depot, Ogden, Utah			
Compressor, air, two stage air cooled electric motor	3 ea	(QM-42-015-52-4)	7 Sep 51
Commanding Officer, Naval Supply Depot, Mechanicsburg, Penn. Attn: Code 778B			
Misc. refrigeration parts, mfgd and to be supplied by General Electric Co.	14809 ea	72-24707 Q	31 Aug 51
Misc. refrigeration parts, mfgd and to be supplied by Penn Elec. Switch Co.	1230 ea	72-24717 Q	31 Aug 51
Misc. refrigeration parts, mfgd and to be supplied by York Corp.	15571 ea	72-24732 Q	31 Aug 51
Misc. refrigeration parts, mfgd and to be supplied by Frick Co.	9185 ea	72-24703 Q	31 Aug 51
Bureau of Ships, Navy Dept., Washington, D. C.			
Condensing unit equipment for air conditioning		549-255 Q	12 Sep 51

## GENERAL SERVICES ADMINISTRATION

The General Services Administration is now selling standard Federal Specifications at its ten Regional offices. In addition, indexes (lists) of the standard Military specifications may be inspected at the GSA Regional offices, but the Military specifications themselves are not for sale there. Inquiries may be addressed to the General Services Regional Office at any of the following locations:

Room 620, P.O. and Courthouse Boston, Mass.	1800 Federal Office Bldg. 911 Walnut Street Kansas City, Missouri
250 Hudson Street New York City, N. Y.	1114 Commerce Street Dallas 2, Texas
Room 7287 Federal Supply Bldg. 7th and D. Streets S. W. Washington 25, D. C.	Bldg. 1-C Denver Federal Center Denver, Colorado
50 Whitehall St., S. W. Atlanta, Georgia	630 Sansome Street San Francisco 11, Calif.
Room 528 Court House 219 S. Clark Street Chicago, Illinois	U. S. Courthouse Seattle 4, Washington

## CONTRACTS AWARDED AS OF AUG. 16, 1951

### Description — Contractor and Address

Yards and Docks Supply Office, U. S. Naval Construction Battalion Center, Port Hueneme, Calif.	Refrigerator	158	240,919	Hussmann Refrigerator Co., 2401 N. Leffingwell Ave., St. Louis 6, Mo.
Department of Commerce, Maritime Administration, Washington 25, D. C.	Refrigerators	115	24,725	King Refrigerator Corp., 76-02 Woodhaven Blvd., Glendale, Long Island, N. Y.
Navy Purchasing Office, New York, N. Y.	Freezers	200 ea	36,270	Kelvinator Div., Nash-Kelvinator Sales Co., 2010 Kendall St. N.E., Washington, D. C.
U. S. Navy Purchasing Office, 1206 South Santee St., Los Angeles 15, Calif.	Refrigerators	272 ea	34,544	Barker Bros. Corp., 7th St., Los Angeles.
San Francisco District, Corps of Engineers, U. S. Army, 1 Powell St., San Francisco, Calif. (Purchasing Office)	Type K hard drawn copper tubing	(not furnished)		Wolverine Tube Div., Decatur, Ala.

## 'Another First'

# Houston Claims Only Completely Cooled University as Texas Schools Seek Comfort

HOUSTON, Tex.—More and more universities and colleges in Texas have come to know and enjoy the benefits of air conditioning during the past few years, according to an executive of York Corp.'s southwest district who has assisted in the selection of equipment and design of air conditioning systems for many of these institutions.

Among these are the University of Houston in Houston, Rice Institute in Houston, Texas A & M college in College Station, and Baylor university in Waco and Houston.

The University of Houston has added another "first" to the long line of "firsts" held by Texas as it is believed to be the first major university to have all of its permanent buildings air conditioned.

The Ezekiel W. Cullen building costing about \$5,000,000 houses administration offices, classrooms, studios, and an auditorium seating 1,680 people. The \$1,500,000 M. D. Anderson Library has recently been completed, as have five dormitories valued at \$3,600,000.

## New and Old Get Cooling

All these buildings, together with the old administration building, the science building, the industrial building, and the recreation building, are completely air conditioned, it is reported.

The new University of Houston \$1,000,000 power plant houses the heating and cooling equipment for all buildings on the campus. Hot and chilled water are circulated through tunnels to the various buildings, some of which are a half-mile from the power plant.

Chilled water is supplied by three York turbo compressor water cooling systems, each having a capacity equivalent to the melting of 725 tons of ice per day. Plans for the future include two additional water cooling systems of the same capacity.

## Texas A & M Center

Another example of what has been done by public spirited citizens is the new Texas A & M Memorial Student Center building, which was financed by the contributions of former students as a memorial to Aggies serving in the wars. This beautiful and unusual completely air conditioned building, with its wide entrance, is an appealing invitation for students to enter, relax, and enjoy themselves. Huge numbers of them do.

Inside they find a large lobby, a hotel complete with 66 bedrooms, dining room, and coffee shop, numerous lounges, piano, record playing room, gift shop, barber shop, soda fountain room seating 200, game rooms, several student activity rooms, social room, browsing library, ballroom, sun deck, starlight terrace, photography lab, art room, and in the basement, table tennis, shuffleboard, and an eight-lane bowling alley with provision for an equal number of additional alleys to be added later.

This building was designed by Carlton W. Adams, A & M System architect, and decorated by famed Interior Designer Robert D. Harrell of Los Angeles. The water cooling system for air conditioning consists of two 150-hp. York V/W compressors, four economizers, and one shell and tube water cooler.

## Baylor University

Baylor university is noted for many of its cultural facilities, notably its famous Browning Collection housed in the new air conditioned Browning Memorial Library. Dr. Armstrong of Baylor is one of the world's foremost authorities on the poet Browning and has made the collection his life's work. This library is visited by students of Browning from all over the world.

The Baylor Medical school, completed in 1948, is located in the new Houston Medical Center and is one of the foremost institutions of this type in the South.

The school occupies a multi-story building containing laboratories, classrooms, lecture rooms, and offices, all having the latest equipment, including air conditioning for summer and winter. Chilled water for the air conditioning is supplied by a 400-hp.

York turbo compressor water cooling system.

## Rice Institute Library

The Fondren Library at Rice Institute is believed to have one of the best collections of its kind in the country, comparing favorably with the Firestone Library at Princeton and the Lamont Library at Harvard. It has a capacity of more than 600,000 volumes and now has over 200,000 books on its shelves.

Not only are there wonderful facilities for research and technical reading but there is also a large collection of recordings for students to play without disturbing others. There are also a film projection room, lecture rooms, seminar rooms, and administrative offices.

Although the air conditioning for this building was designed primarily for the protection of valuable books and manuscripts, it is needless to say that the students derive much pleasure and comfort from the "book protection." The library is a favorite haunt of students on warm Houston days.

The refrigeration required to cool the thousands of gallons of water used in the air conditioning system is supplied by a 350-hp. York turbo compressor water cooling system.

Air conditioning in schools and institutions is a relatively new field, since it was formerly thought to be too expensive. Progressive colleges in Texas, however, have come to realize that air conditioning is desirable from many standpoints and are finding ways and means to pay for it.

## 2 Maryland Firms Named To Sell Sweden Freezers

SEATTLE—Fosco Refrigeration and Distributing Corp. of Hagerstown, Md., and the Shenandoah Valley Products of Laurel, Md. have recently been named authorized sellers by the Sweden Freezer Mfg. Co., builder of the well-known Sweden speed freezer.

The Fosco Corp. is headed by Harry P. Cramer and was organized 6 years ago to distribute commercial refrigeration equipment manufactured in Hagerstown by the Victor Products Corp.

Shenandoah Valley Products adds Sweden to its extensive ice cream mix and flavor lines. I. W. Berman, president and sales manager, has devoted several years to advising retail ice cream and custard installations in the making of its products and the operation of its equipment.

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### VOLUME 1

Measuring Temperature; What Heat Is; Temperature-Pressure Relationships; Components in the Compression Cycle; Expansion Valves and Their Properties; Capillary Tube; Float Valves; Heat Exchangers; Oil-Refrigerant Mixtures; Control Settings; Air Circulation; Multiple Systems; etc.

### VOLUME 2

Condensers; Compressor Shaft Seals; Defrosting Evaporators; Compressor Oil; Charging Refrigerant; Humidity and Air Circulation; Carbon Dioxide; Use of Gauges; Trouble-Shooting; Preventive Maintenance; Control of Moisture; Leaks; Care of V-Belts; Lapping Seals, Plates; Service Charts.

### VOLUME 3

Lost Time and Short Cuts; Refrigerants and Tables; Mollier Chart; Two and Three Stage Compression; Leaks and Moisture; Electric Currents; Single and Three Phase Systems; Motor Troubles; etc.

### VOLUME 4

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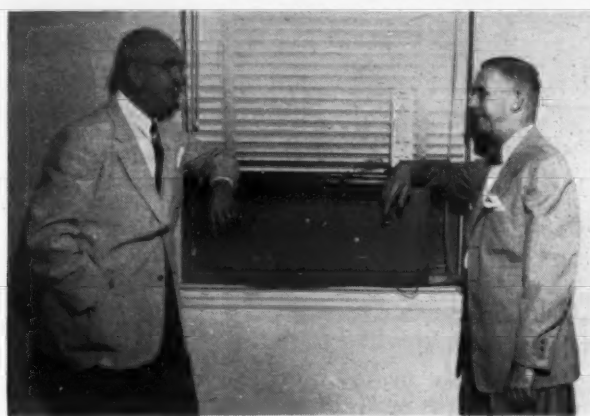
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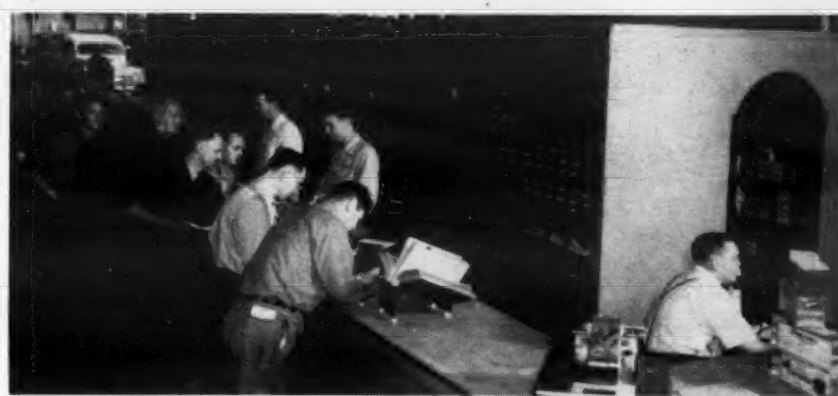
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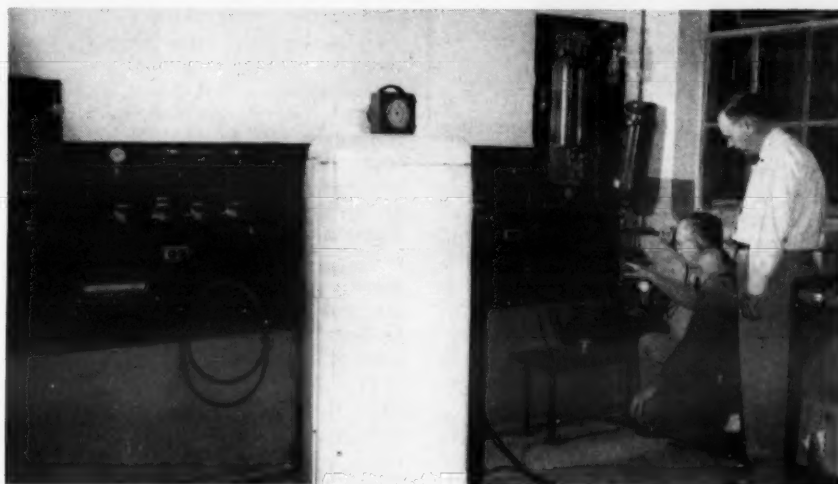


WINDOW UNIT in executive office of Refrigeration Service, Inc. has dual thermometer so R. F. Callaway (left) or A. C. Ellerbusch can show visitors unit's effectiveness.

EXPENSIVE drapes and carpeting (left) add realistic touch to sales floor display of operating window unit.



SERVICEMEN line up at counter in huge parts department maintained by Refrigeration Service.



UNUSUAL test and charging board devised by Earl Jennings and Ed Neal (right) carries both "Freon-12" and "Freon-114" and incorporates unique setup to reclaim and re-use refrigerant employed for leak tests.

## Sudden Move Proves Boon to Large Detroit Service Firm, Which Is Now Under 1 Roof

By C. Dale Mericle

DETROIT—"We were forced to move and move quickly. This was available."

"This" turned out to be an ideal location because Refrigeration Service, Inc., is now located at one of the busiest intersections in Detroit. The building not only offers an excellent display floor (with glass on three sides) but has adequate facilities for offices, parts, shop, and parking.

It has a street number, too, that ought to be easy to remember: 11111 Grand River Ave.

Urgency of the company's change in location was a direct result of the accelerated defense program. Refrigeration Service had occupied a portion of a large factory-type building which Buick Motor Co. had taken over for defense production.

The move also brings all the company's operations under one roof. Since it was organized its operations have been handled from two locations. At one the firm maintained its salesroom and offices for the Frigidaire air conditioning and commercial refrigeration line it represents (also doing a good business in the sale of reconditioned household refrigerators, water coolers, and other items). The other location housed its operation as the authorized Frigidaire service organization.

Now, everything is together.

Incidentally, the firm takes understandable pride in the combined refrigeration experience of its four top officials which totals well over 100 years. A.C. Ellerbusch and R. F. Callaway, for example, account for 60 years between them, all of them with the Frigidaire organization. E. F. Neal and L. G. Herschelman, the other principals, combine 50-odd years in refrigeration.

Ellerbusch and Callaway started with the Frigidaire factory when it was located in Detroit in the early 1920's. Ellerbusch, who heads Refrigeration Service, has long directed Frigidaire service operations in Detroit, while Callaway had been general manager of the Frigidaire Detroit branch for many years until his retirement in 1948.

As for the new location, Ellerbusch comments: "We couldn't have picked a better spot geographically. It saves

our men an average of 20 minutes a day in getting to work, compared to the former location."

The location ought to attract a lot of attention to the firm, too, he indicates.

"An outdoor advertising firm which surveyed the corner tells us that 4,124,550 people pass the intersection every month. And these are not just the same people.

### TO CAPITALIZE ON LOCATION

Refrigeration Service plans to capitalize on the location and traffic by extensive use of signs on the building. The showroom will help in this because it's large (2,000 sq. ft.) and has glass on three sides. Former occupants of the property used it for automobile sales and service.

In all, the building has more than 15,000 sq. ft. while the parking area totals some 20,000 sq. ft. An additional 28 by 40-ft. warehouse is located on the property.

As befits a firm which promotes and sells a lot of air conditioning, the general offices and salesroom of the new building are air conditioned, and next year the shop and parts department will likewise be air conditioned.

Two 5-ton Frigidaire package conditioners connected to ducts were installed to cool the offices and salesroom. The boss's office, however, is served by a 1-hp. Frigidaire window unit.

"We put this in partly for demonstration purposes," Ellerbusch explains.

Not only can visitors to his office feel the results but they can see them, for there is a dual thermometer with one bulb in the air intake and the other in the outlet of the unit.

"With this we can show them in degrees just how much cooling is performed by the unit."

And to show prospects how such a unit will fit into a conventional window, the company went to considerable expense to have replicas of steel and double-hung wood sash windows built for the salesroom. The windows are in sections of a wall complete in every detail on both the exterior and interior sides, even to

expensive drapes and carpeting.

Although this firm is very much sales-minded, as the above indicates, servicing has long played a dominant role in its operations. There are five girls and two dispatchers in the call office, for example, to take warranty and out-of-warranty service calls and to route servicemen.

The parts department is exceptionally large, perhaps the largest of any servicing dealer in the country. Many parts wholesalers in the refrigeration business, in fact, do a highly successful business in less space than occupied by the parts department of Refrigeration Service.

Considerable space is devoted to the shop, which is unusually well lighted thanks to numerous windows and many fluorescent fixtures. Here the complete job of repairing and reconditioning refrigeration equipment is performed. There's a sizeable spray booth for touching up or completely refinishing cabinets.

For three years now the firm has been using metal spray guns for repairing damaged cabinets. Instead of taking a cabinet apart and pulling out the insulation to bump out a dent, the dent is filled in with metal and then refinished.

"We think any tool that saves time and helps do a better job is a profitable investment," comments Ed Neal who directs the over-all shop, service, and installation activities of the firm.

### USING A 'HOLE-PUNCHER'

He cites other examples such as hole-punchers for installing window units, angle-cutters, and recording thermometers.

"Hole-punchers are very useful when installing window air conditioners. Instead of having to drill through the sheet metal, the installer can quickly punch holes with this tool," he explains.

"The angle-cutter is a great time-saver on installations of larger equipment. Instead of spending 15 minutes or more with a hacksaw to cut just one angle on a job, the man can cut them in a matter of seconds with the angle-cutter. First time I saw one of these cutters it was mounted on the truck of a sign installation crew.

metering devices to measure the exact charge of refrigerant which the unit calls for. The board also measures the charge of oil and alcohol added to hermetics.

### 'F-12' TESTING, RECLAIMING

A unique feature of the board, however, is the "Freon-12" testing and reclaiming setup. Refrigeration Service uses the "F-12" gas under 100-lb. pressure to test complete systems or coils for leaks. Units are filled with gas and then checked with a leak detector. But instead of throwing the gas away after the test, it is reclaimed and used over and over again.

This gas is fed from a 145-lb. drum which usually contains 50 to 60 lbs. of "Freon-12". It goes through a booster pump (Frigidaire Meter-Miser) to raise the pressure to 100 lbs. This gets away from the usual method of heating the refrigerant cylinder with a torch to raise its pressure.

After the system to be tested is filled with gas and checked for leaks, a vacuum pump (a ½-hp. compressor) pulls this refrigerant out of the system and pumps it back into the cylinder.

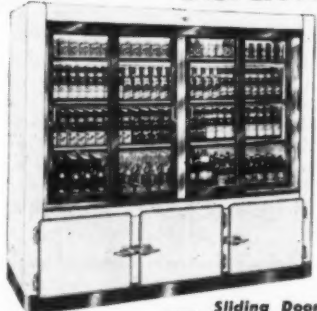
All this is done with the refrigerator or coil hooked up to the charging board. A valve is turned to bring in the refrigerant for leak testing and then this valve is closed. Opening another valve after the leak test is completed evacuates and reclaims the refrigerant. A gauge on the board will also show the vacuum pulled by the unit.

With the unit still hooked up to the board, it is charged by opening another valve.

Such a setup does run into money, but both Ellerbusch and Neal declare: "The cost of the board is really inexpensive considering the time it saves."

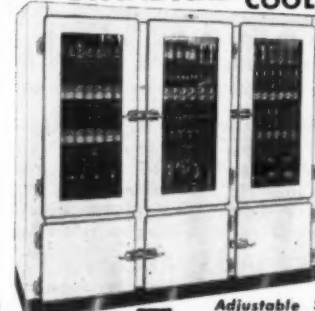
## FOR FASTER DISPENSING... MORE ECONOMICAL COOLING... BETTER DISPLAY *insist on* P-H DRY BEVERAGE COOLERS

### THE BEVERAGE DISPLAYER



Sliding Door Type

### THE STANDARD DISPLAY COOLER



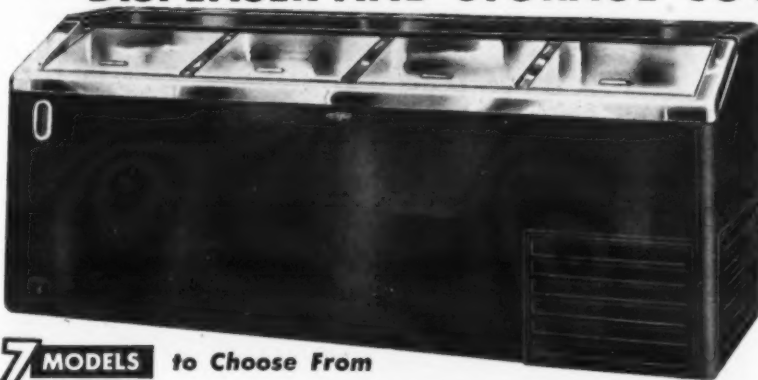
Adjustable Shelves

### FEATURING

1. Porcelain or Stainless Exteriors
2. White Porcelain Interiors
3. Welded Steel Frame
4. Sealed-In Fiberglass Insulation
5. Triple Thermopane Glass Doors ("Displayer" and "Standard" models)
6. Grad-U-Matic Air Conditioning
7. Underwriters Approved

(Available in "Lifetime" PORCELAIN OR STAINLESS STEEL EXTERIORS)

### THE DISPENSER AND STORAGE COOLER



With Rollaway Stainless Steel Doors — Adjustable Partitions



5 MODELS to Choose From

5 MODELS to Choose From

For Complete Information — Contact Your Nearest P-H Dealer or Write Direct!

**PUFFER-HUBBARD MANUFACTURING CO.**

7 MODELS to Choose From

GRAND HAVEN, MICHIGAN

DISPLAY CASES • DAIRY-DELICATESSEN CASES • PASS-THRU CABINETS • DRY BEVERAGE COOLERS • DOUGH RETARDERS • FLORIST CABINETS • WALK-IN COOLERS



## Refrigeration Problems

### and their Solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

## Question & Answer On Sweating Around Door

### QUESTION:

We would like to overcome a complaint of a sweating condition around the doors of a stainless steel backbar, on highly humid days. The side of the doors and cabinet has Formica strips. The frame is wood and the cabinet and doors are insulated with Fiberglas. The interior of the cabinet and of the doors is of stainless steel. The doors have a good rubber gasket that fits tightly.

There is a curved blower coil facing the doors, so we recently placed a diffuser in front of the doors to keep the cold blast of air from striking the doors, and we are now waiting to see if this will help.

### ANSWER:

Sweating of the refrigerator around the doors is a common complaint, and it is caused by just one thing: the outer metal is colder than

the dewpoint temperature of the outside air. On days when the air is fairly dry, its dewpoint temperature is low—low enough to be below the temperature of the chilled outer surface of the refrigerator.

On moist days, the dewpoint temperature of the air is above the temperature of the chilled outer surface of the refrigerator, so moisture condenses out of the air on to the cool metal; for it will be remembered that the dewpoint temperature of the air is the temperature at which moisture starts to condense out of the air.

To prevent "sweating," which is moisture condensed from the moist air, the outer surface must always be kept above the dewpoint temperature of the air.

The outer metal becomes chilled from the cold temperature inside the refrigerator, so it becomes a matter of keeping this outer metal from becoming chilled below the dewpoint temperature. It is not too difficult to do this in the case of most of the outer shell of the refrigerator, for it is merely a matter of using enough insulation to prevent the outer shell from being chilled by the cold inside.

It is much more difficult in the case of the metal around the doors, for three main reasons.

### AIR LEAKS OUT THE DOORS

1. In a backbar, the service is frequently heavy, especially if as true in many taverns, bottled beer is served from the backbar.

With the blower coil arranged to blow the cold air toward the doors, the cold air is blown out of the doors every time the doors are opened. This cold air tends to chill the outer metal of the cabinet around the doors.

It would help somewhat to rearrange the coil so that it blows its cold air away from the doors. In a food cabinet, it is better to arrange the coil so that the air entering the refrigerator when the door is opened is drawn through the coil before it can strike the food. In this way, the cold coil reduces the moisture content of the air before it strikes the food. If the warm, moist air strikes the cold food first, moisture is condensed on the food and causes it to be slimy.

This makes little difference in the case of bottled goods, however. Nevertheless, there would be less likelihood of sweating around the doors if the coil air were blown away from, instead of toward the doors. The diffuser you mentioned should help this condition materially.

If the door gasket is tight, there should be little leakage of cold air out of the doors when the doors are closed. Nevertheless, the cold air blast against the doors certainly makes it more difficult to prevent cold air leakage past the gasket.

### INSULATED "BREAKER-STRIP"

2. There must be some sort of material connecting the outer shell and the inner liner at the door openings, and this applies also to the inner and outer metal on the doors themselves. There must be some sort of hard, durable material to give strength, to withstand usage, and to seal against moisture getting into the insulation.

If we were to let the inner and outer metals overlap or touch one another, there would be a good path for heat flow, so the outer metal would be quickly chilled. Therefore, the two edges of the metals should be kept as far apart as possible, and the strip of material joining them (called a breaker-strip, for it breaks the flow of heat between the metals) must be a reasonably good insulator.

The material that you are using is a good one for a breaker-strip. However, you might check the amount of overlap of the edges of the two metals. Maybe they are closer to one another than is necessary.

### LACK OF INSULATION AROUND DOORS

3. Some sort of framing (in your case wood) is necessary at the door opening and in the door. Dry wood is a fairly good insulator, but not as good as the rest of the insulation in the wall of the cabinet, so it offers less resistance to heat flow. Consequently there is more likelihood of the outer metal near the door openings being chilled than the metal which is farther away from the door openings.

The framing of the doors (called the "stiles") does not have to be as heavy and massive as the framing of the cabinet around the door opening (called the "mullions"), so it is more difficult to properly insulate the mullions. Also, there is very little space for insulation in the mullions—either the upright mullions or the cross mullions. Almost all of this space is taken up with wood framing at the expense of the insulation.

For this reason the outer sheet metal overlaying the mullions is apt to be chilled to a lower temperature than the rest of the shell because it is not insulated from the cold inner liner as well.

Only the manufacturer of the cabinet can control this in the design of the cabinet, especially the mullion construction. He may find that he can use less wood and more insulation in the mullions, especially between two adjacent doors, and still retain sufficient frame strength.

You mention that the blower coil blows air directly on the doors. This

aggravates the sweating condition, for it tends to chill the inner liner around the doors lower than if the coil were mounted elsewhere in the cabinet in such a manner that the air passing the inner part of the cabinet near the doors would be return air to the coil, and, therefore, somewhat warmer, and with lower velocity.

The diffuser that you have installed will tend to lower the velocity of the cold air striking the doors and will probably help somewhat in overcoming the sweating. As mentioned in (1), it would be preferable to rearrange, if possible, the blower coil, so that the cold air from the coil blows away from the front of the cabinet.

### USE OF ELECTRICAL HEAT

It has become quite common in the last few years for manufacturers to use low voltage, metal-sheathed electrical resistance cable imbedded just under the outer metal around doors or other places which it is difficult to keep warm and which, therefore, sweats. The electrical resistance cable warms the metal just enough to keep it above the dewpoint temperature of the air. It does not take a great deal of heat to accomplish this, therefore the wattage used is low.

This method is especially effective on low temperature cabinets and open self-service cases, on which, because of the low temperatures, it is particularly difficult to keep the surfaces warm enough to prevent condensation.

## James Cohan Named Adv. Mgr. for K-R Services

NEWARK, N. J.—James S. Cohan has been named advertising manager of K-R Services, Inc. here, it was announced today by J. M. Kerbey, vice president. He will be in charge of advertising and sales promotion for Allied Distributors-New Jersey, Inc.; Associated Distributors-New Jersey, Inc.; and Krich-New Jersey, Inc.

Prior to his association with the Krich organization, Cohan was affiliated with the William N. Scheer advertising agency, Newark. He was formerly employed by the Krich organization as assistant advertising manager where he was employed for two years prior to joining the Scheer Agency.

## Manning, Maxwell & Moore Rents Additional Space

NEW YORK CITY — Manning, Maxwell and Moore, Inc., manufacturer of valves, gauges, instruments, cranes, and hoists, who is celebrating its 100th year in business, has rented a large portion of the 11th floor of the new 32-story Chrysler Bldg. East.

Tenants of the original Chrysler building since 1934, the company at present occupies the entire 65th floor. They will move into the new, fully air conditioned Chrysler Bldg. East, which adjoins the original building, as soon as it is available. It is scheduled for completion on or about Nov. 1, 1951.

The offices of the company in the Chrysler Bldg. East will serve as headquarters for the eastern sales district for the concern's Consolidated Ashcroft Hancock Div. and Shaw-Box Crane and Hoist Div., and as headquarters for its expanded export branch.

## Kaylo Div. Promotes 5 In Sales Department

TOLEDO — Five men have been promoted in a sales department expansion move for the Kaylo division of Owens-Illinois Glass Co. They are A. V. Baber, H. E. Casey, E. C. Shuman, W. R. Lugar, and P. W. Boyd.

The Kaylo division manufactures and markets hydrous calcium silicate insulating and building products.

Baber has been made manager, heat insulation sales. Casey now has the title of manager, structural product sales.

Boyd has been given the new post of supervisor of laminated products. He is an electrical engineer, formerly with Frigidaire.

Shuman has the titles of director of research and manager of product development. Lugar also carries two titles, that of general branch manager having been added to his previous title, manager of sales control.

### NEW PRODUCTS?

Turn to "What's New" Page for useful information on new products. Use Key No. for fastest service.

## DOLE PLATES

Serve Every Refrigeration Need

**DOLE Vacuum Cold Plates** . . . the original and patented cold plate evaporators . . . are widely used in every refrigeration and air conditioning application. Thin and compact, they require less space and thus provide more room for foods; are highly efficient in operation and require no service.

**DOLE Vacuum Cold Plates** are available in five types, each applicable to a wide range of uses:

### OVERHEAD PLATES

for Locker Rooms, Cold Storage Warehouses, Ice Cream Hardening Rooms and Ship Refrigeration Holds.

### QUICK-FREEZE PLATES

for Freezing Cabinets and Rooms and for Foods Freezing and Processing.

### SODA FOUNTAIN PLATES

for Soda Fountains, Ice Cream Cabinets, Home and Farm Freezers, Dispensing Cases and Beverage Coolers.

### HOLDOVER TRUCK PLATES

for Ice Cream, Meats and Frozen Foods delivery to Stores or Homes.

### ICE-CELS

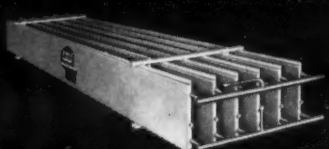
for Air Conditioning and for Cooling such Products as Milk and Cream, Candy and Dough and in distilling and anodizing processes.

Ask for Catalogs

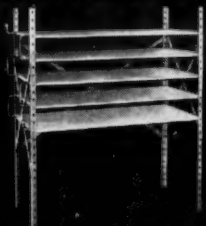
and Price

List

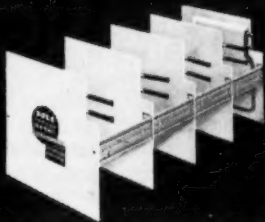
### OVERHEAD PLATES



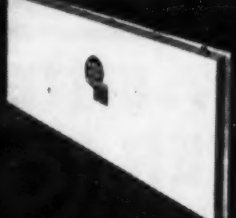
### QUICK-FREEZE PLATES



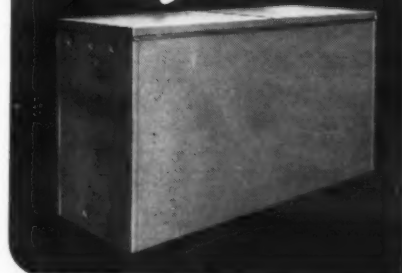
### SODA FOUNTAIN PLATES



### HOLDOVER TRUCK PLATES



Ice-Cels

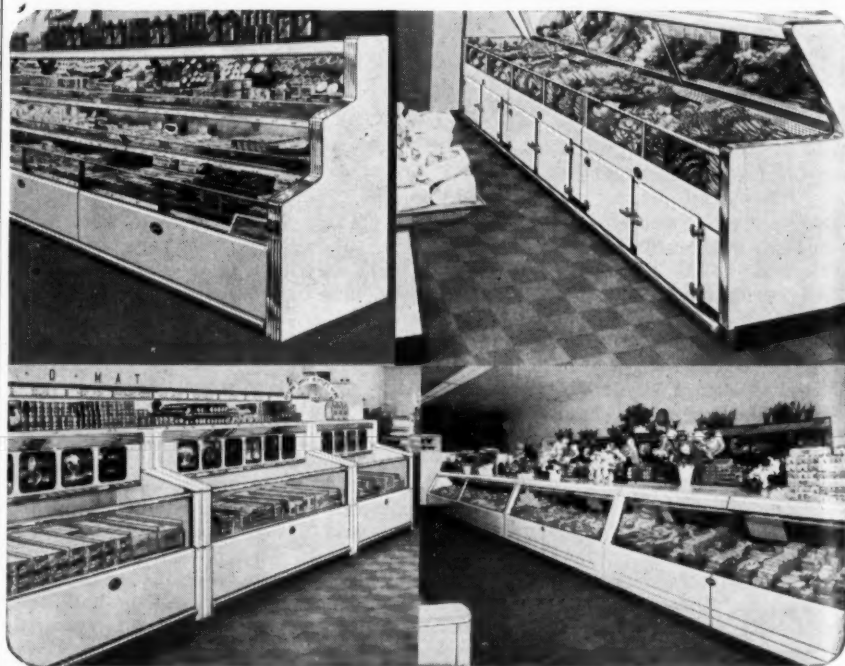


**DOLE REFRIGERATING CO.**

5920 N. PULASKI RD., CHICAGO 30

103 Park Ave., New York 17

44 Elgin St., Brantford, Ont.



**Federal** "ADVANCE ENGINEERED" TO MAKE Valuable Floor Space PAY OFF BIG!

Up-to-date stores using FEDERAL "advance engineered" displays and refrigerators . . . enjoy greater profit from greater sales. With over 50 models to choose from, there is a FEDERAL model for any size store. All designed to make valuable floor space "pay-off big".

**YOUR MEAT DEPARTMENT** . . . send sales soaring with Federal Service type Meat Displays (we make self-serve types too) they are a modern asset to your shop. Reliable in performance . . . they are acclaimed everywhere. Just look at these features: Tops in profit per foot per week • Easy to load and work • Quick sliding non-slick doors • Giant sizes (3 platters deep) • Keeps fresh meat fresh • "Eye Appeal Styling" Standard lengths adaptable to continuous display.

**DAIRY SALES UP!** Yes, with a centralized dairy department! Federal has open displays, reach-ins with gliding doors, all types all sizes for spotting your new dairy department. These compact models, streamlined to save floor space . . . increase sales.

**PROFIT FROM PRODUCE.** Go after bigger produce department dollars! FEDERAL produce displays . . . give you mass display so necessary for volume sales. Easy to load and easy to reach features, plus the double-duty storage compartments . . . all refrigerated for correct temperature and humidity to keep vegetables fresh . . . longer! Standard lengths . . . adaptable to continuous display.

Federal "Advance Engineered" designs, can save you money, help increase your volume, "step-up" turnover. Investigate Federal the modernized line. Dealers in principal cities, or write to  
**FEDERAL REFRIGERATOR MFG. CO.**  
WAUKESHA, WISCONSIN

**Federal**  
REFRIGERATORS



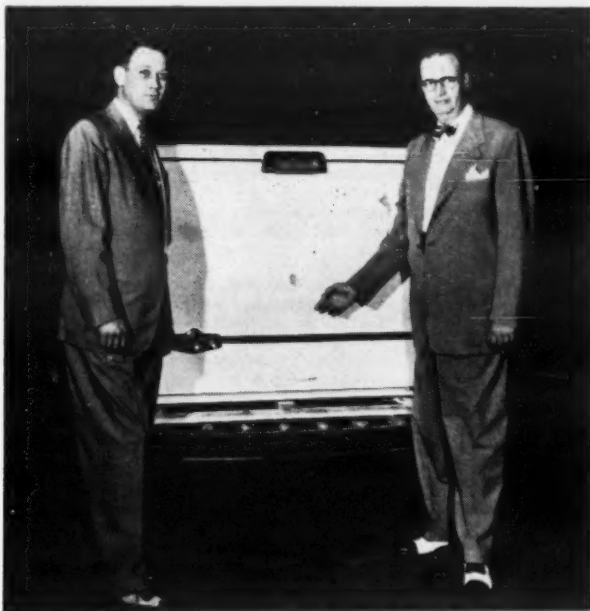
# What D'ya Know?

What did you see in this issue? Try your memory on these clues about news and advertising. If you get the answer on the first clue, score 5; second clue, score 3; final clue, score 1. Excellent, 20-25; Good, 13-19; Fair, 9-12; below 9, Poor.

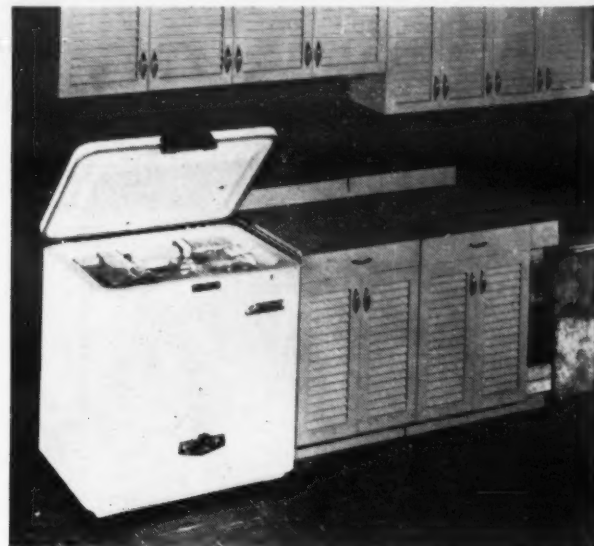
- (a) Filter manufacturer introduces new design to the industry. (b) Uses Fiberglas for depth filter. (c) Will be sold under the "Cross-Flow" trade name.
- (a) Air conditioning installation serves two purposes. (b) Cools customers during the day, provides cold storage for perishable fruit at night. (c) It's a Typhoon installation in New York City.
- (a) A 20-year guarantee! (b) Pittsburgh manufacturer makes this claim for its cooling tower.

- (c) Sells them under the HM trade-mark.
- (a) Well-known engineer will answer questions of interest to the service and installation man. (b) His column is a regular NEWS feature. (c) This week he answers a query about sweating around the door of a backbar.
- (a) Versatility of its carbonators is this advertiser's theme. (b) A diagram shows a typical soda fountain installation. (c) "Be right with ....." is their slogan.

Answers: 1. Remco, Inc., pg. 12. 2. Smitten Brothers Fruit Store chain, pg. 13. 3. Halstead & Co., pg. 12. 4. Mitchell, pg. 10. 5. Tempriple Production Corp., pg. 12.



W. S. Hall (left), home freezer division sales manager, and Ben G. Sanderson (right), general sales manager, inspect first new Deepfreeze home freezer to come off line.



This C-7 Deepfreeze model has a capacity of 7.22 cu. ft. and holds 252 pounds of food.

## Murphy Dies --

(Concluded from Page 1, Column 2) Corp. in 1915, predecessor of the present company.

Years before this, as a young employee of Buffalo Forge Co., he worked with the late Dr. Willis H. Carrier when the latter devised and installed the first scientific air conditioning system in 1902.

Murphy became ill only five days before his death. He was taken to a San Francisco hospital from his home, 30 miles north of the city, for treatment of bronchial pneumonia and appeared to be progressing satisfactorily prior to a sudden relapse. Services were held on Aug. 24, in the chapel of Halstead & Co., San Francisco funeral director.

Born in New York City in 1880, he graduated from Lehigh university with a degree in mechanical engineering in 1901. After a year with Bethlehem Steel Co., he went to Buffalo Forge and was immediately assigned as an assistant to Willis Carrier.

The problem on which they were working was to control both temperature and humidity in the plant of Sackett-Wilhelms Lithographing & Publishing Co. in Brooklyn, which among many other publications printed the humorous magazine of that day, "Judge." In a recent letter to a friend, Murphy recalled:

"We rather quickly discarded the idea of chemical dehumidification because of the heat released in the calcium chloride reaction. We then turned to the use of mechanical refrigeration in preference."

The system finally devised by Willis Carrier was a success, and Murphy helped to complete the actual installation in the Brooklyn plant in 1903.

After an interlude as sales engineer for B. F. Sturtevant Co. in 1904-1906, he served as Philadelphia manager for Buffalo Forge and its subsidiary, Carrier Air Conditioning

Co. of America, from 1907 until Carrier Engineering Corp. was formed as an independent company in 1915.

Murphy was named secretary and shortly thereafter vice president of the new corporation and directed its sales and engineering activities in the Philadelphia area for the next 12 years.

He continued as vice president of the present Carrier Corp. after its formation in 1930, and was elected to the board of directors. He later served in Newark, N. J., and was in charge of the Chicago district from 1934 to 1939, when he assumed responsibility for all marketing activities at the new headquarters of the corporation in Syracuse.

Murphy moved to the West Coast late in 1949, and was active there in a consulting capacity up to the time of his brief illness.

He was a member of the American Society of Mechanical Engineers, the American Society of Heating & Ventilating Engineers, and the Air Conditioning & Refrigeration Manufacturers Association.

## Gas Appliance Producers Look for Rise in Sales

NEW YORK CITY—Relaxed consumer credit controls and normal seasonal activity are expected by marketing men of the Gas Appliance Manufacturers Association to bring about increased sales of gas appliances during the remainder of 1951.

It was also noted that in the 12 months from July 1 of this year to June 30, 1952, about 2,662,000 gas ranges will be required for new housing and replacements, according to a recent study.

The association said shipments of domestic gas ranges in the second quarter totaled 516,000, down 26% from the corresponding period of 1950. July shipments amounted to 106,500 in July, a drop of 58% from a year ago.

## Deepfreeze Line--

(Concluded from Page 1, Column 4) and are subject to change, Sanderson pointed out.

Three engineering advancements are stand-out features in the new deluxe models. These are the "Silent Signal" electrical indicators, the "Menu-Maker", a container combination especially designed for pre-cooked meals, and the "Handy Basket" for most-used frozen foods.

The "Silent Signal" indicates that desired temperature is being maintained in the freezer. A white light glows constantly to show that power is on. The red light shows if inside temperature becomes too high, it is pointed out.

The "Menu-Maker" is a new feature especially designed for home-makers who want to pre-cook entire meals or develop meals from leftovers. Four one-pint aluminum containers—in red, blue, green, and gold—fit into a special compartment which is easily accessible. Each container can be used for freezing, heating, and serving.

The "Handy Basket" is a double deck, side-opening basket, which can be reached easily, and is designed to hold most-frequently-used frozen foods. A hinged side on the basket permits removal of foods stored in the lower half of the basket, without disturbing foods stored above.

Other features include the counter-balanced lid, which has a trigger-action handle with lock. Freezer interior is automatically illuminated when the lid is raised.

"Sweat-proof" design is claimed to prevent moisture formation on the outside of the cabinet under all humidity conditions. The freezer has a hermetically sealed unit.

Over-all capacities and food storing facilities of the new models follow:

The B-7 has a 7.22-cu. ft. storage capacity and holds 252 lbs. of frozen foods. The C-7 is the same size but has deluxe features.

The B-13 has a 12.84 storage capacity and holds 450 lbs. of food. The C-13 is comparably sized but includes the deluxe features.

The C-17 and C-23, both with complete deluxe features, have 16.89 and 22.52-cu. ft. capacities, respectively and hold 590 and 788 lbs. of frozen foods, respectively.

## Owner of Danforth Co. In Pittsburgh Dies

PITTSBURGH—Irving W. Danforth, president and owner of the Danforth Co., Westinghouse distributor in Allegheny county, died Aug. 17 in West Penn hospital at the age of 56.

A prominent Pittsburgh business and civic leader, Danforth at one time was president of the Electric League of Western Pennsylvania, it is reported.

Danforth was a native of Cleveland. After serving in the Army Air Force during World War I, he joined Gabriel Mfg. Co., an auto accessory concern, and became its sales manager. In 1924 he moved to Pittsburgh to head his own company as distributor of Gabriel products. Later, his firm was appointed distributor for Westinghouse products in this territory.

## Iranian Group Wants To Buy Refrigeration Equipment

WASHINGTON, D. C.—Hassan Maleki, representing Army Cooperative Society, Teheran, Iran, informed the U. S. Department of Commerce that he wishes to purchase refrigerators, electric fans, and air conditioners.

He was scheduled to spend three months in the United States. His address while in the United States will be the Iranian Consulate General, Rockefeller Plaza, New York City 20, N. Y.

## 500 Sunroc Water Coolers To Go to Marine Bases

GLEN RIDDLE, Pa.—Five hundred electric water coolers are to be delivered to East and West Coast Marine bases during October and November under terms of a contract recently awarded Sunroc Co.

The coolers will be produced in their new plant.

### JUST ASK US!

Turn to "What's New" Page for useful information on new products.

## Champagne - Caviar - and Comfort



HIDDEN behind the valances in the swank Marine Dining Room of Chicago's Edgewater Beach Hotel exists an engineering masterpiece—hundreds of feet of air conditioning ductwork bringing year-round comfort to the gourmet. This is part of the hotel's new 50-ton Carrier air conditioning system, installed by Talbert-Thomas Co., Chicago distributor and contractor.

First reported on the pages of AIR CONDITIONING & REFRIGERATION NEWS, the Chicago job is one of many thousands each year that demonstrate ACRN's unapproached penetration of the air conditioning and refrigeration market.

The "Newspaper of the Industry," for example, is a weekly reading "must" for Albert G. Weil, energetic president of Talbert-Thomas. I. J. Kristufek, sales manager who originated the basic design of the installation, is a regular reader. Edward Fitzgerald, installation foreman, William Tebeau and Henry Varming, who head the service department, also read ACRN.

At Carrier Corporation, manufacturer of the equipment, readership of ACRN starts at the president's office and extends through every important sales and engineering post throughout its worldwide network of field offices and sales outlets. Carrier, of course, is a consistent ACRN advertiser.

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BUSINESS NEWS PUBLISHING COMPANY, 460 W. FORT ST. DETROIT 26, MICHIGAN

## NEMA June Refrigerator Sales Hit 309,125

Summary for June and First Six Months, 1951  
Complete Refrigerators Only—Sales by Sizes—Units

JUNE (16 Companies)				
Domestic (48 States and D. C.)		Canadian	Other Foreign	Total
Sizes				
1. Less than 4 cu. ft....	.....	.....	.....	.....
2. 4 cu. ft. ....	2,370	234	1,457	4,061
3. 5 cu. ft. ....	.....	.....	.....	.....
4. 6 cu. ft. ....	29,450	241	6,399	36,090
5. 7 cu. ft. ....	17,046	1,886	6,067	24,999
6. 8 cu. ft. ....	92,580	2,390	13,486	108,456
7. 9 cu. ft. ....	22,426	2,922	5,751	31,099
8. 10 cu. ft. ....	48,711	1,529	2,764	53,004
9. 11, 12, 13 cu. ft. & up..	48,715	323	2,378	51,416
10. Total .....	261,298	9,525	38,302	309,125
FIRST SIX MONTHS				
Domestic (48 States and D. C.)		Canadian	Other Foreign	Total
Sizes				
1. Less than 4 cu. ft....	118	.....	.....	118
2. 4 cu. ft. ....	18,340	598	3,441	22,379
3. 5 cu. ft. ....	1	.....	.....	1
4. 6 cu. ft. ....	156,977	9,475	18,262	184,714
5. 7 cu. ft. ....	280,057	6,011	25,886	311,954
6. 8 cu. ft. ....	853,958	10,039	53,790	917,787
7. 9 cu. ft. ....	334,080	13,584	18,737	366,401
8. 10 cu. ft. ....	377,285	4,240	14,789	396,314
9. 11, 12, 13 cu. ft. & up..	387,532	5,753	13,707	406,992
10. Total .....	2,408,348	49,700	148,612	2,606,660

Participating companies: Admiral Corp.; Avco Mfg. Corp.; Coolerator Co., The; Deepfreeze Appliance Div., Motor Products Corp.; Frigidaire Div., General Motors Corp.; General Electric Co.; Gibson Refrigerator Co.; Hotpoint Inc.; International Harvester Co.; Kelvinator Div., Nash-Kelvinator Corp.; A. J. Lindemann & Hoverson Co.; Norge Div., Borg-Warner Corp.; Refrigeration Div., Philco Corp.; Sanitary Refrigerator Co.; Seeger Refrigerator Co.; Westinghouse Electric Corp.

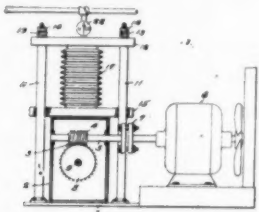




# PATENTS

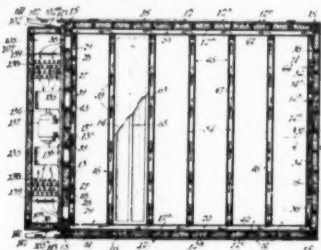
## Week of May 15 (Cont.)

2,553,247. **COMPRESSOR.** Everett E. Fowler, New York, N. Y. Application Nov. 19, 1946, Serial No. 710,812. 1 Claim. (Cl. 230-160.)



In a compressor for refrigerating chambers a base; pairs of upstanding parallel guide posts rigidly mounted at opposite sides of said base; fixed plates rigidly secured to the respective pairs, each plate being extended between the upper ends of the guide posts of a pair and being formed with a pair of oppositely check valved openings extending therethrough, said openings respectively comprising an outlet and an inlet for refrigerating gases; spaced crossheads each having end openings through which the guide posts of a pair extend, said crossheads being mounted for up and down sliding movement upon the guide posts; a pair of bellows each fixedly secured at its upper and lower ends respectively to a fixed plate and a crosshead, said check valved openings being in communication with the interior of said bellows; and means for imparting up and down reciprocating movement to said crossheads, said means being adapted to elevate one crosshead simultaneously with lowering of the other crosshead for alternating compression of the respective bellows, thus to provide a substantially continuous flow of compressed refrigerant gases through said outlet openings, said means constituting a motor mounted upon said base; a reducing gear box mounted on the base and centered between the respective pairs of guide posts; an operative driving connection extending between the motor and said gear box; driven shafts extending out of the gear box laterally to positions under the respective bellows; eccentrics secured to the respective driven shafts, the high points of said eccentrics being spaced 180° apart; and rollers mounted upon the undersides of the crossheads and rollably engaged by the respective eccentrics.

2,553,471. **MEANS FOR THE TRANSPORTATION, REFRIGERATION, AND DISTRIBUTION OF PERISHABLE FOODS.** Harry W. Protzeller, Fairmont, Minn., assignor of one-half to Arthur Wm. Nelson, Chicago, Ill., and S. F. Judd, executor of said Harry W. Protzeller, deceased, assignor of one-half to Arthur Wm. Nelson, Chicago, Ill. Application June 23, 1944, Serial No. 541,810. 5 Claims. (Cl. 62-102.)

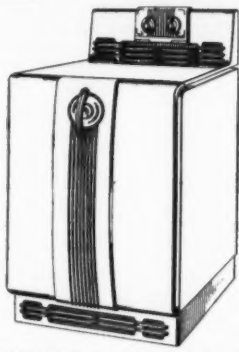


1. A portable refrigerator container embodying rectangularly disposed upright walls forming a hollow product receiving space for the product to be refrigerated, a plurality of upright hollow walls extending between two of said spaced upright walls and dividing the product space into a plurality of compartments, a refrigerating unit for chilling air, said unit being disposed externally of said rectangularly disposed upright walls and being carried by said container so as to be transportable as a unit therewith, said refrigerating unit including means for recirculating the chilled air through a path including the space between the walls defining said upright hollow walls and a heat extracting portion of the refrigerating unit.

### DESIGNS

163,261. **REFRIGERATOR.** Henri Desguin, Koekelberg, and Nestor Sauvage,

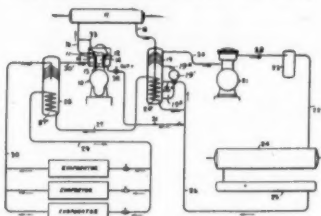
Berchem-St.-Agathe, Belgium, assignors to Ponderies Nestor Martin, Societe Anonyme, Berchem-Brussels, Belgium, a company of Belgium. Application April 27, 1950, Serial No. 9,524. In Belgium Oct. 28, 1949. Term of patent 14 years. (Cl. D67-3.)



The ornamental design for a refrigerator, substantially as shown and described.

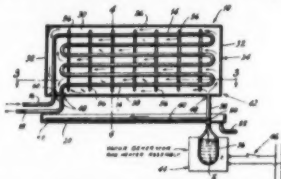
## Week of May 22

2,553,623. **MULTISTAGE REFRIGERATION SYSTEM.** Frank R. Zumbro, Waynesboro, Pa., assignor to Frick Co., Waynesboro, Pa., a corporation of Pennsylvania. Application May 5, 1944, Serial No. 534,373. 16 Claims. (Cl. 62-115.)



6. In a refrigeration system, a low stage compressor, a high stage compressor and a cooling unit or evaporator with interconnecting conduits, said low stage compressor being provided with cylinder walls having a cooling jacket surrounding the same and defining a cooling chamber, a conduit connected into the system between the high stage compressor and evaporator and leading to said cooling chamber and another conduit leading from said cooling chamber to the system between the discharge of the low stage compressor and the intake of the high stage compressor, and whereby a portion of the stream of refrigerant may be bypassed from the high pressure side of the system through said cooling chamber and the returned to the system without passing through the cooling unit, and means for expanding refrigerant prior to entering said cooling chamber.

2,553,657. **REFRIGERATOR DEFROSTING METHOD AND APPARATUS.** Louis F. La Porte, Wellston, Mo., assignor to Francis L. La Porte, San Bernardino, Calif. Application March 6, 1947, Serial No. 732,742. 6 Claims. (Cl. 62-126.)

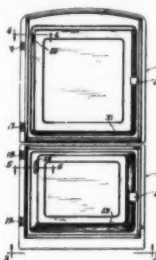


5. In a method of defrosting the cooling unit of a refrigeration apparatus including a compressor and having associated therewith an integrated system of hollow components including an upper portion in intimate contact with portions of said unit, and a lower depending portion constituting a reservoir located a selected distance from said unit: the steps of turning off the compressor, and evaporating a predetermined quantity of a volatile liquid hermetically sealed within said system and normally adapted to collect in said reservoir following a defrosting operation by applying heat externally to said reservoir during a defrosting operation, thereby causing said liquid to vaporize and rise within the system, to condense upon entering the cooling unit, and thereupon to return in reliquefied form by gravity to said reservoir for reevaporation until the aforesaid application of heat is discontinued.

2,553,693. **LIQUID COOLING DEVICE FOR REFRIGERATORS.** Andrew H. Wehr, Erie, Pa. Application Jan. 13, 1949, Serial No. 70,665. 1 Claim. (Cl. 62-141.)

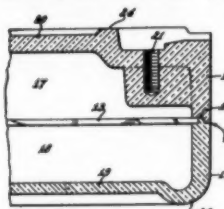
A refrigerator cabinet having walls comprising inner and outer casings with a heat insulating liner therebetween, food storage and freeze compartments in said cabinet, a cooling coil between said casings having vertically spaced horizontal convolutions secured to the inner casing and positioned about a portion of said food storage compartment, said coil being connected to a refrigerating coil positioned about a portion of said freeze compartment, means connected to said cooling coil and said refrigerant coil for circulating a refrigerant therein, said cooling coil comprising a plurality of spaced convolutions, a liquid cooling coil between said casings having a plurality of spaced convolutions nested within convolutions of said cooling coil in heat exchange relation therewith, channel members mounted upon said inner casing between said casings, said cooling coil and said liquid cooling coil each having a convolution received in each channel member, means for securing each convolution within its channel member, said convolutions within a channel member being disposed each adjacent a side wall of the channel member, said last means comprising lugs on each side wall partially embracing the convolution adjacent thereto for maintaining said convolutions in said channel member in spaced relation to each other, and liquid inlet and liquid outlet means connected to said liquid cooling coil.

2,553,832. **REFRIGERATOR DOOR.** William E. Richard, Evansville, Ind., assignor to Seeger Refrigerator Co., St. Paul, Minn., a corporation of Minnesota. Application Oct. 27, 1947, Serial No. 782,282. 2 Claims. (Cl. 20-35.)



1. In a refrigerator door structure, the combination of a stamped sheet metal outer shell of substantially rectangular form in elevation, the said shell being outwardly convex and inwardly concave and curving inwardly around three edges of the shell to a common plane, said shell having a substantially right angular edge wall at its fourth edge extending to said plane, and said shell being provided with an inwardly extending plane flange on its back side about all of its edges at said plane, an inner panel formed of initially plastic heat insulating composition and being substantially rectangular in elevation and of a size overlapping said inwardly extending flange, said inwardly extending flange and said panel being provided with registering apertures at a plurality of spaced points about the shell and panel, a door seal comprising a deformable body portion and an inwardly extending flange spaced from the body portion and having a groove between said latter flange and the body portion for receiving the edge of the panel, an angle stiffening member located on the inner side of said plane flange of the shell along each side and the top and bottom and having registering apertures located with respect to the apertures in the panel and threaded members extending through the panel, the seal flange and the shell flange, and threaded into said angular member, which is of greater thickness than the shell and adapted to stiffen the door about all of its edges, and a fibrous insulation located in said door between the shell and panel thereof, said panel being provided with ventilation apertures adjacent its top on one side and adjacent its bottom on the other side inside said door seal for bringing about convection air currents through the door, resulting in the dehydration in the insulation of the door by an evaporator located in any refrigerator to which the door may be attached.

2,553,879. **INSULATED DOOR FOR REFRIGERATED CABINETS.** Herbert A. Stewart, Utica, N. Y., assignor to Savage Arms Corp., Utica, N. Y., a corporation of Delaware. Application Dec. 29, 1947, Serial No. 794,367. 1 Claim. (Cl. 220-30.)

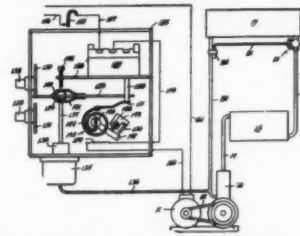


A door structure for refrigerated, low temperature, storage cabinets comprising an inner pan-shaped element having a transparent flat surface portion and a flange portion embordering and framing the same, a transparent flat element of sheet form and an outer transparent pan-shaped element substantially similar in structure and complementary in form to said inner pan-shaped element, hinge and handle attaching means on said outer element, said pan-shaped elements being in complementary position with their open areas oppositely disposed and joined together at their rim portions with the flat sheet held medially between the rims by a single continuous tongue and groove joint, the tongue of said joint being an integral part centrally of the rim of one pan-shaped element, the groove being located centrally of the rim of the other pan-shaped element with the peripheral edge of the flat sheet element providing the inner wall of said groove, said flat element being interposed between the two pan-shaped elements as a dividing partition to form two closed air cells, the three elements being closed and sealed together with the continuous tongue and groove joint to provide an insulated door structure with transparent portions of good visual quality framed by integral protective flanges.

2,553,979. **CONTROL FOR REFRIGERATING APPARATUS.** Alvin B. Newton, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Co., Minnea-

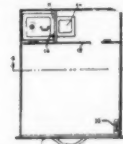
polis, Minn., a corporation of Delaware. Original application Aug. 1, 1941, Serial No. 405,032.

1. In refrigerating control apparatus of the character described, in combination, a control device comprising a switch having



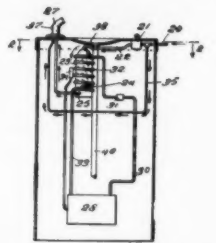
switch operating means, pressure operable means for actuating the switch operating means, and ambient atmosphere temperature responsive means independent of said pressure operable means arranged to engage the switch operating means below a pre-determined relatively low temperature for operating the switch to a circuit making position, said temperature responsive means being so constructed and arranged as to be normally disengaged from said switch operating means so as not to interfere with the operation of the switch.

2,554,290. **PORTABLE UTILITY REFRIGERATOR UNIT.** Otto Edward Becker, Los Angeles, Calif.



In combination with a portable refrigerator unit having a condenser fan, a drawer with an aperture for air circulation near its back corner, a hinged division board for covering said aperture when the refrigerator unit is removed, said board in cooperation with the drawer forming a compartment for said refrigerator unit when in a vertical position.

2,554,417. **SANITARY WATER COOLER.** Samuel O. Morrison, deceased, late of Media, Pa., by Ella P. Morrison, executrix, Media, Pa., assignor to Sunroc Refrigeration Co., Dover, Del., a corporation of Delaware. Application Dec. 29, 1949, Serial No. 135,711. 2 claims. (Cl. 62-41.)



1. In a water cooler, a dispenser having a dispensing nozzle and a flushing nozzle adapted to direct water on the dispensing nozzle, a connection to a source of drinking water containing available chlorine, a filter containing a chlorine absorber, piping from the connection to the source through the filter to the dispensing nozzle of the dispenser and by-pass piping from the connection to the flushing nozzle of the dispenser by-passing the filter.

(To Be Continued)

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**GOVERNMENT SURPLUS.** Original prominent brand fiberglass filters 15" x 20" x 2" will fit in 16" x 20" x 2" frame. .60¢ each, in lots of 50-50¢, 100-45¢, 500-40¢. F.O.B. N.Y. Z. CASTOR, 1 Sickles St., N. Y., N. Y.

**1/4-HP open and sealed type prominent brands condensing units complete;** brand new; limited quantity; act now; \$52. each FOB New York; write for specifications. Other sizes also available; MANN REFRIGERATION SUPPLY CO., 15 Astor Place, New York 3, N. Y.

**ELECTRIC MOTORS & starters.** Inventory clearance to make room for defense contract. Assortment of brand new, leading make motors & starters. Sizes from 1/4 to 7 1/2 hp., both 1 and 3 phase. Offered at

list, less maximum equipment manufacturers' discount. Write for list now while best sizes are available. REFRIGERATION ENGINEERING CORP., P. O. Box 7838, Phila. 1, Pa., Kingsley 5-3630.

**FOR SALE**—while they last—standard makes—new hermetic units—static & fan-cooled cond. 1/4, 1/2, 3/4, 1, 1 1/2. Open Units—1/4-1/2-3/4. Relays—1/4-1/2-3/4-1-1 1/2—also overload protectors. #673 Methyl T.X.V. Capacitors in jet-black steel case 190-240 mfd. Small hermetic driers. 1/4" fl.-7 1/2" overall Driers. Household Cold Control—w/Knob & plate. Also other parts and supplies. Send for our latest list and prices. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln Ave., Chicago, Ill.

**SALE—ROOM coolers.** Big name, top brand 1/2 HP window air conditioners, all new 1951 models, 5 year warranty, \$229.00 each. Reply BOX 3782, Air Conditioning & Refrigeration News.

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### BUSINESS OPPORTUNITIES

**FOR SALE**—Commercial refrigeration and air conditioning contracting business—Several name makes of refrigeration and air conditioning. Three trucks & approx. \$8,000 inventory of parts and equipment. Sales and service gross \$80,000 annually—business has over 250 commercial accounts in a 12 mile radius. Established since 1941. Reason for selling—other business interests. Sale price \$3,000 over inventory cost. Location—"God's Country" Western Michigan—on Lake Michigan. Save yourself five years of building up a business, invest in one already on top. Reply to BOX 3801, Air Conditioning & Refrigeration News.

### MISCELLANEOUS

**NORGE SEALED units remanufactured and exchanged.** Immediate delivery from stock, 1 year warranty. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Complete set of three, \$1.15 plus postage. MODERN REFRIGERATION CO., Inc. 12541 E. McNichols Road, Detroit 8 Michigan.

**NORGE SEALED units remanufactured or exchanged**—all models 1939 through 1946, \$49.50. Ship inoperative units to us freight collect. Replacement will go forward immediately freight collect. All replacement units are charged with Freon-12 and covered by a one year warranty. NORD HERMETIC CO., 1701 San Leandro Blvd., San Leandro, California.

**FOR SALE**—10,000 ft. prominent brand fin tubing. Catalogue No. 075042. 1/4 in. tube, 1 1/4 in. fin diameter. Various lengths 23 1/2 in. to 88 1/2 in. Price \$.50 per ft. F. O. B. Minneapolis. Offered subject to prior sale. Write UNITED STATES AIR CONDITIONING CORP., Como Ave. SE at 33rd, Minneapolis, Minn., Telephone: Nestor 4501.

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## Quarter Century of Selling Servel

FIVE SERVEL MEN celebrate 25th anniversary. Each has been selling Servel and Electrolux since 1926. Left to right they are: Roderic Peters, Washington; Seward Abbott, Los Angeles; B. O. Brown, Evansville; George R. Copeland and E. A. Dunham, New York City.

## Appliance Specialty Stores Account for Nearly Third of '50 Refrigerator Sales

NEW YORK CITY—Appliance specialty stores, which accounted for one third of all refrigerator sales during 1949, fell just slightly short of capturing this share of the market during 1950, according to a study made recently by the National Electrical Manufacturers Association.

Department stores and furniture stores, which between them accounted for another third of sales during 1949, also fell short of retaining this share in 1950, the survey found.

The various other outlets that sold the remaining third of refrigerator volume during 1949 picked up a total of 3.8% on the leaders in 1950. Even in this group, broken down into nine different types of outlets, five increased their share in 1950 and four lost ground.

The largest single gainer by far was the apartment house and builder group, whose share rose from 7% to 9.7% of the refrigerator sales market.

Very slight gains were made by utilities, farm implement stores, and plumbing establishments. Outlets in the miscellaneous category accounted for 5.9% of sales in 1950 as compared with 4.3% in 1949, NEMA further reported.

Settling for a slightly smaller share of total sales in 1950 were hardware stores, lumber yards, automotive stores, as well as jewelry stores.

The percentage comparisons listed for the two years are the following:

Type Outlet	1949	1950
Appliance specialty . . .	33.3%	32.4%
Department . . . . .	17.8	16.0
Furniture . . . . .	16.5	15.4
Apartment house, builder . . . . .	7.0	9.7
Hardware . . . . .	6.5	6.1
Automotive . . . . .	4.6	4.0
Farm Implement . . . . .	4.0	4.3
Utilities . . . . .	3.1	3.4
Jewelry . . . . .	1.3	1.2
Plumbing . . . . .	1.1	1.2
Lumber . . . . .	0.5	0.4
Other . . . . .	4.3	5.9

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8-27-51

## Hotpoint Announces National Refrigeration Sales Contest Winners

CHICAGO—A total of 125 merchandise prizes worth \$50,000 are being awarded by Hotpoint Inc. to dealers who won a national refrigerator sales contest held in June.

The nation's three top dealers and their prizes were:

Central Appliance Co., Chicago, Cadillac Coupe de Ville; Wellons' Mercantile, Dunn, N. C., Buick Roadmaster Riviera; and Chuck's Refrigeration & Service, Tomah, Wis., Buick Super Riviera.

A Buick also was awarded to Claude Pancake, Bluefield (W. Va.) Supply Co., as top distributor salesman.

Winners were selected on the basis of highest sales per cent over quotas assigned each dealer. This permitted small dealers to compete equally with retailers who do a larger refrigerator volume, the company pointed out. The contest applied to Model EB81, a standard 8-cu. ft. box.

A breakdown of the sales performance over quota of the top winners follows: Central Appliance, 4,020%; Wellons' Mercantile, 3,050%; Chuck's Refrigeration, 3,300%; and Pancake, 650%.

Other prizes included dealer awards consisting of \$1,000 and \$500 vacations; and \$150, \$100, and \$50 merchandise prizes. These are being awarded on the basis of the nine top dealers from each of the company's 11 sales districts. In addition, the top distributor wholesale salesman from each district wins a \$1,000 vacation.

## Space-Saving Expansion Program

## Canadian Meat Packer Orders Country's First Centrifugal Ammonia Condensing Machine

TORONTO, Ont., Can.—The first centrifugal ammonia condensing machine ever to be installed in Canada has just been ordered for a special, space-conserving refrigeration expansion program in the Toronto plant of Canada Packers Ltd., it has been announced by Carrier Corp.

Canada Packers Ltd., is one of the Dominion's largest meat packing companies.

The compact machine will supplement existing compressors, enabling the plant to increase refrigeration capacity without the need to build additional space for installation, according to officials of Carrier's International division.

As a special feature, provision for a back pressure steam turbine drive will make it possible to use steam for plant processing purposes after it has been used in producing plant refrigeration.

The ammonia condensing unit resembles Carrier's centrifugal refrigeration machines, and consists essentially of a centrifugal compressor and matching, close-coupled condenser and cooler.

The unit's "Freon" refrigeration cycle removes the latent heat from the ammonia, causing it to condense without the need for compression. The ammonia gas from the plant's cold diffusers will be piped directly into the cooler, from which it will emerge as a liquid at minus 1° F. The centrifugal condensing unit

will be operated in parallel with a number of existing reciprocating compressors. It will be driven by 1,130 hp. steam turbine, and will have a refrigeration capacity of 600 tons. The order was placed through Carrier Engineering, Ltd., Carrier's Canadian subsidiary.

## Paul Holmes Named to NPA Building Materials Div.

WASHINGTON, D. C.—Appointment of Paul B. Holmes of Washington, D. C. as assistant director of the Building Materials division, with supervision over plumbing and heating matters, has been announced by the National Production Authority.

During most of his business career, Holmes has been associated with the National Radiator Co. He formerly was manager of the Washington branch, which includes the southeastern seaboard. From 1944 to 1948 he was sales manager of the company's heating division.

From 1948 until the time of his NPA appointment, he was owner of Paul B. Holmes & Co. of Washington, manufacturers' agent for a number of producers of plumbing and heating supplies. His sons now manage the company.

Holmes is a member of the American Society of Heating and Ventilating Engineers.

## HOUSEHOLD REFRIGERATION

4 BOOKS BY K. M. NEWCUM

1 BOOK ON GRUNOW SERVICE

You can use these books for reference, review, or study

### THEORY

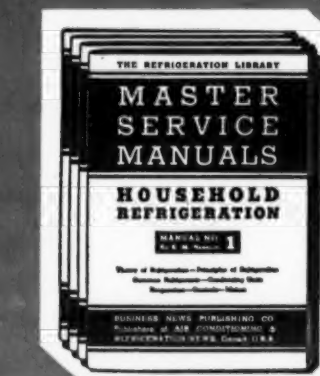
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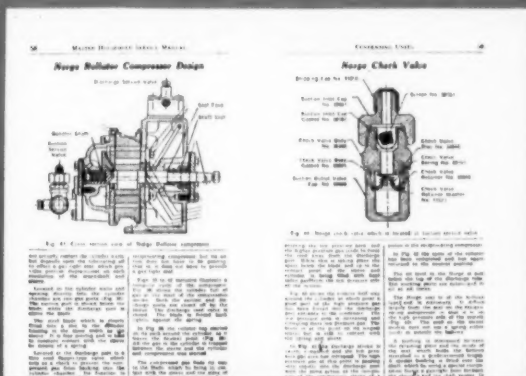
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## Essential Construction Projects--

(Concluded from Page 1, Column 3)

orders for controlled materials without going through NPA for approval if the amount of materials does not exceed certain specified limits.

For construction of projects using more than these amounts, the regulations require the builder to file an application with NPA or a claimant agency for an authorized construction schedule and a related allotment of controlled materials.

### FOUR CLASSES OF PRIORITY

Four classes of priority or essentiality have been established as follows under the NPA grading system:

Class 1 priority—Construction projects which will further the defense effort by providing facilities in areas adjacent to military establishments or defense plants. Class 1 priority will be given to steel, aluminum, and aircraft expansion facilities construction and similar "command" projects.

Class 2 priority—Construction classified as essential to the maintenance of public health, safety, or welfare. All industrial construction and plant expansion, following issuance of certificates of necessity, construction of which had been commenced prior to Aug. 3, will receive Class 2 priority.

Class 3 priority—Construction required as result of fire, flood, or disaster materially affecting the public interest; or where it is essential to meet the needs and requirements of the community.

Industrial construction and plant expansion pursuant to certificates of necessity issued after Aug. 3, or where the issuance of a certificate of necessity was prior to Aug. 3 but the construction had not commenced until after Aug. 3, will be given Class 3 priority.

Class 4 priority—All other industrial construction will be given a Class 4 priority.

The test of relative need and essentiality must be applied, NPA said, because quantities of controlled materials for plant expansion and industrial construction are not adequate to meet the requirements of all industrial construction demands.

In such instances, the recommendations of the claimant or sponsoring agency or NPA industry division must be obtained and screened to determine what particular construction can be deferred.

### GENERAL CONSTRUCTION

On the subject of "general" construction, NPA said no allotment will be made for construction of recreational types of construction (listed in NPA Order M-4A in Table I) in the absence of proof that an unreasonable hardship will be suffered if the allotment is denied.

However, the following types of general construction will be subject to consideration:

1. Public construction sponsored by states, municipalities, and other public bodies, including public water works, whether publicly or privately owned (excluding schools, hospitals, and public roads, where housing and other types of construction control has been delegated to other agencies).

2. Commercial construction such as office buildings, stores, service facilities, warehouses (excluding operating construction for communications facilities which is subject to Order M-77), radio and television facilities,

public utilities (except those items which are subject to Order M-50), and similar types of construction.

3. Construction for religious purposes.

A special section of the criteria is devoted to construction that already has been commenced. Special consideration in making allotments will be given where the failure to finish commenced construction would be uneconomical or would cause materials loss or waste, or where completion of such construction is in the public interest.

In connection with commercial construction, NPA said neither loss of profit, prospective or otherwise; or financial loss of individual; or personal inconvenience; or lack of efficiency of commercial operations, shall be controlling or influencing factors in determining whether or not construction must be postponed.

### HOW REGULATION APPLIES

To illustrate application of the new regulations to various special situations, NPA provided the following explanations:

1. If a prime contractor has in inventory before Oct. 1, 1951, all of the controlled materials required for construction of any building, structure, or project other than a multi-unit residential structure or a type on Table I of Order M-4A, he may commence construction without making application to NPA.

This interpretation applies without regard to the amount of controlled materials used in the construction, so long as the prime contractor will not require deliveries of controlled materials after Sept. 30, 1951.

2. A prime contractor has in inventory 50 tons of steel plus all the copper which he requires for the completion of his proposed building. He desires to build a commercial building which will require 100 tons of steel for completion. He may not commence construction unless he receives an authorized construction schedule since, after Sept. 30, he will require delivery of more than two tons of steel per quarter.

3. A prime contractor has in inventory 50 tons of steel. He desires to build a commercial building which requires 52 tons of steel plus 200 pounds of copper for completion. He may commence construction at the present time since, after Sept. 30, he will not require delivery of more controlled materials than the amount for which he may self-authorize his orders for delivery.

4. A prime contractor has in inventory 50 tons of steel and 1,000 pounds of copper. He desires to build a commercial building which will require 50 tons of steel and 500 pounds of copper for completion. He may commence construction now since he will not require delivery of any controlled materials after Sept. 30.

5. The rules stated under Items 2, 3, and 4 above apply equally if the building is already under construction. Therefore, if the building referred to in Item 2 is under construction, the prime contractor will be permitted to continue construction during the third quarter.

### MUST FILE FORM CMP 4-C

He may not continue after Sept. 30, 1951, unless he has filed an application on Form CMP 4-C for authorization to continue after Sept. 30 and has received an allotment. There is no guarantee that such application will be granted. In the instances cited in Items 3 and 4, the prime contractor will be able to continue construction without stopping, and without filing any application on Form CMP 4-C.

6. If a prime contractor has received permission to construct under NPA Order M-4 but had not commenced construction, he may not now commence construction unless he receives an authorized construction schedule and related allotment, if the project will require more controlled materials than the quantities for which he may self-authorize orders for delivery.

7. In instances where an authorized construction schedule and related allotment of controlled materials has been granted in the third quarter by the Federal Security Agency for the construction of a school or hospital, the prime contractor may continue with the construction under way or may commence construction at this time if he has not already done so.

8. A prime contractor who has been issued a certificate of necessity for plant expansion, and a DO-46, is nevertheless subject to Order M-4A and to CMP Regulation 6.

## Big Equipment Makers Get New Pricing Plan

WASHINGTON, D. C.—Manufacturers of machinery and related equipment that have been pricing under CPR-30 will be permitted the use of pre-Korean percentage mark-ups in pricing under a new regulation, CPR-67, which becomes effective Aug. 27.

(The group of producers covered by this regulation includes manufacturers of refrigeration units of 25-ton capacity and over, and some refrigeration system components.)

Firms pricing under the new order may take the same markup on costs as they did in the period April 1-June 24, 1950.

## Lane's Store Cooled with Steam Absorption System

NEW YORK CITY—New York City's newest department store, Lane's, at 14th St. and Fifth Ave., is the first department store in the metropolitan area to use a steam absorption machine for air conditioning, according to Carrier Corp., which installed the new system.

The new four-story structure which opens officially on Sept. 6, will be cooled throughout by a 328-ton absorption refrigeration machine, the company said. The unit, a completely automatic roof-top installation, will operate on low pressure steam, which will also be employed to heat the building.

## Servel Officials--

(Concluded from Page 1, Column 2)

company—and an increase in defense contracts.

In addition to Gilbreath, other new appointments include:

John K. Knighton, vice president in charge of sales; A. F. Scherer, vice president in charge of the international division; F. W. Ortman, Jr., vice president in charge of personnel; S. J. Nicholson, vice president in charge of purchasing; and Rudolph Schnakenburg, vice president in charge of finance. Schnakenburg, retains his post as secretary.

N. J. Litherland was named treasurer, a post relinquished by Schnakenburg, and W. E. Baker, vice president in charge of manufacturing, was named to the additional post of assistant to the president.

O. J. Dail, up to now general manager of the commercial electric refrigeration division, becomes assistant vice president in charge of that division.

Gilbreath became sales manager of the air conditioning division in October, 1945. Previously, from 1940 to 1945, he had been assistant manager of the division. Before coming to Servel, Gilbreath was a sales manager in the commercial division of Nash-Kelvinator, when the all-year gas air conditioner was still in the research stage.

Knighton, identified with the industry since 1925, has been sales manager of Servel for the past two years. He joined Servel in 1939 as sales manager of the air conditioning division and worked closely with research engineers in the development

of the air conditioner.

Scherer joined the firm in 1930 and has directed its business activities in the foreign market. Schnakenburg has been with the firm since it was established 25 years ago, while Nicholson has had 20 years of service.

Ortman joined Servel after the war to head up the company's personnel department. Baker came to the firm in 1934 as vice president in charge of manufacturing.

## 3-Man Board May Decide Basis for Cost-of-Living Hike for Inside Salesmen

WASHINGTON, D. C.—Formation of a three-member labor-management-public ad hoc committee to decide how the new cost-of-living wage increase formula is to be applied to inside salesmen is under consideration by the Wage Stabilization Board, it was reported.

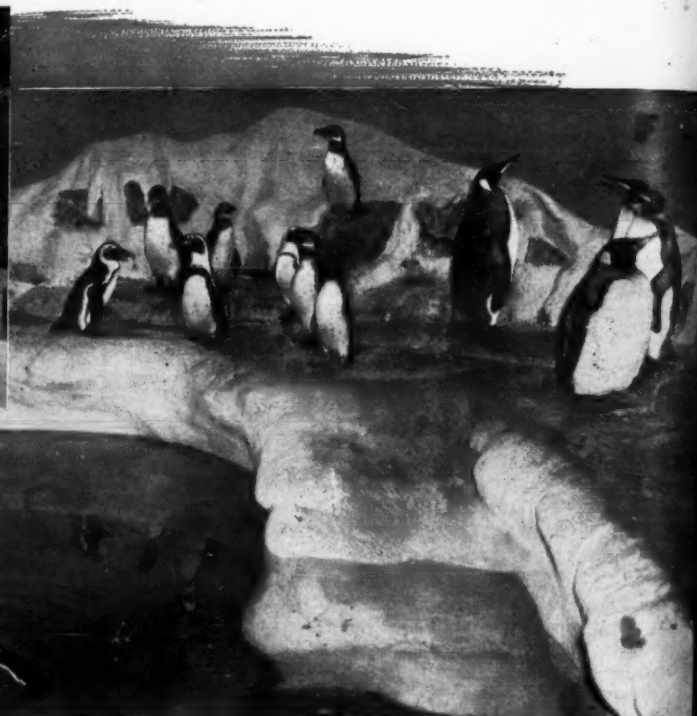
Main problem to be settled is whether approved increases are to be applied to salesmen's commission rates or to drawing accounts.

It is believed the committee member representing retail management may recommend that pay increases be kept at a minimum by ignoring commission rates and establishing instead an average percentage boost in salesmen's earnings over the base period figure.

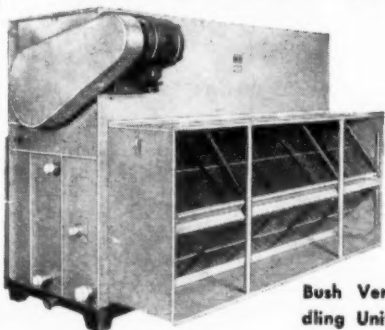
This member is expected to argue that in view of current small profit margins, it would be dangerous to increase compensation beyond a certain point.



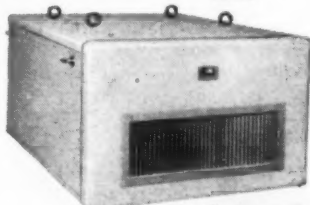
The Bronx Zoo in New York City is one of the largest in the world and contains nearly every known species of bird and animal in existence.



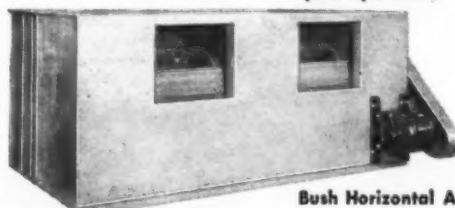
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